

How and Why Government Resource Planning Implementations Differ

Effective Government Financial Management Information
System and Implementation Methodology

The FreeBalance Approach

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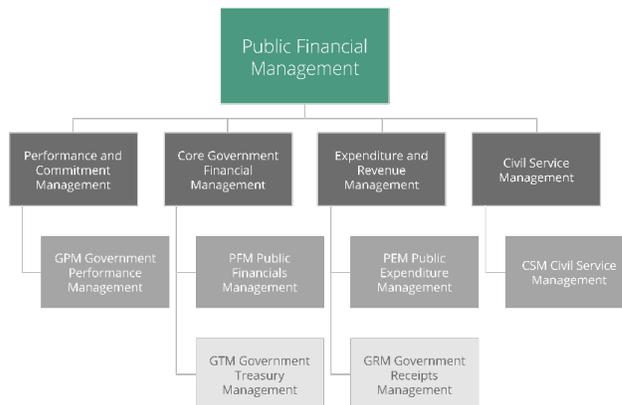
Executive Summary

Governments acquire, upgrade, and replace financial management software to support Public Financial Management (PFM) objectives. This includes reform and modernization programs. Government Financial Management Information Systems (FMIS) are considered core systems of record for public sector fiscal management.

Effective computerization, automation, and integration of FMIS, financial sub-systems, and good PFM practices support the effective allocation of budgets and revenue mobilization to support government strategies.

Governments have financial management choices ranging from custom-developed to Commercial-Off-The-Shelf (COTS) applications to support public sector budget cycles. Software applications cover the entire government budget cycle, and the PFM Component Map.

Government Budget Cycle



Choices made by governments have a significant impact on project success and future financial sustainability. The purpose of this paper is to describe FMIS success factors for COTS Government Resource Planning (GRP) systems like the FreeBalance Accountability Suite™.

This paper confronts conventional project management thinking. FreeBalance tools for FMIS success are described in appendices.

Introduction to Government Resource Planning

What Is the Conventional Thinking About FMIS Project Management?

Project Scope

- **Conventional Thinking:** FMIS implementations are primarily technical in scope.
- **Reality:** FMIS implementations are primarily transformational in scope.

Project Management

- **Conventional Thinking:** Project management practices should be similar regardless of FMIS solution acquired.
- **Reality:** Project methodologies depend on solutions acquired.

Solution Advantages and Disadvantages

- **Conventional Thinking:** All Commercial-Off-The-Shelf (COTS) solutions share similar advantages and disadvantages.
- **Reality:** Government Resource Planning (GRP) software includes more advantages, and fewer disadvantages, than COTS software originally designed for the private sector.

What Financial Management Information System Options do Governments Have?



Governments acquire custom-developed and COTS applications from many sources.

Custom-Developed

- **In-House:** developed by government professions, sometimes with the assistance of external consultants.
- **External:** developed by private sector companies and handed over to governments.
- **Government Custom:** developed for an individual government and refactored to support the unique needs of other governments.

COTS

- **ERP:** Enterprise Resource Planning software developed initially for the private sector, with add-on functionality to support government needs.
- **GRP:** Government Resource Planning software developed exclusively for the public sector, with built-in PFM functionality and no unnecessary private sector functionality.
- **GRP BoB:** GRP Best-of-Breed software covering important financial sub-systems like tax administration, aid and debt management.

This paper does not describe the advantages and disadvantages of each option. Rather, this paper describes the implication of using a modern GRP like the FreeBalance Accountability Suite™.

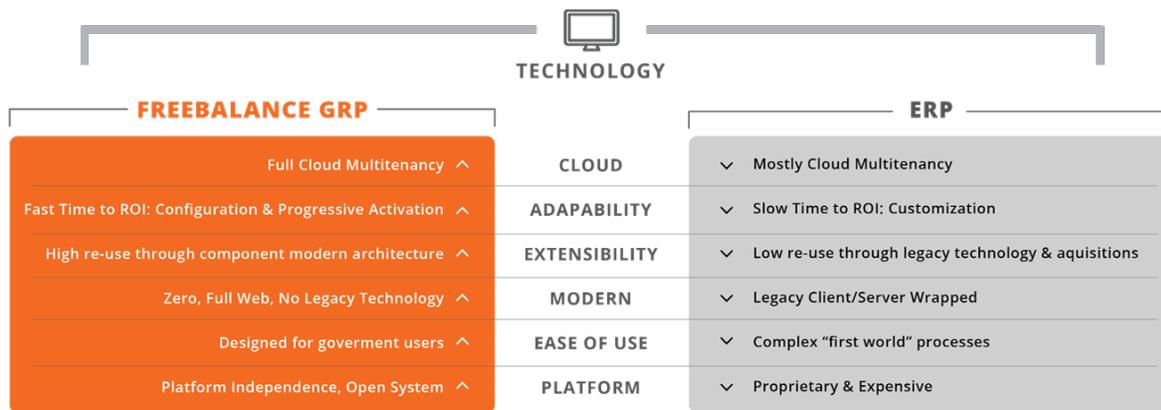
What Is Government Resource Planning?

GRP is COTS software designed exclusively for governments. Some GRP applications are designed for a single country, region, or government tier.

GRP applications differ from ERP by having no unnecessary private sector functionality that impinges on government success rates. Some observers consider GRP as a version of ERP when solutions like the FreeBalance Accountability Suite™ represent systems of record, enterprise class scalability, multiple horizontal functionalities like financials, procurement, and human resources. However, GRP is not implemented in multiple vertical markets or support private sector enterprises¹.

The most important distinction between GRP and ERP is the code customization footprint necessary to meet government requirements. Unlike businesses, governments cannot adopt many built-in ERP functions because these contradict government practices and legal codes. Many built-in ERP practices are overly complicated for governments, while many do not support sophisticated budget practices in the public sector.

¹ <https://freebalance.com/economic-growth-development/grp-is-not-erp/>



High levels of code customization² is associated with high implementation failure rates and poor overall costs - the Total Cost of Ownership (TCO)³. GRP software, like the FreeBalance Accountability Suite™, are massively configurable with no-code parameter and validation settings, language, help, additional tables and fields, screens, Chart of Accounts, Chart of Goals; and low-code workflow. The focus on a single PFM “sub-vertical” enables GRP adaptability to government needs to avoid code customization.

Some observers believe that COTS stands for “Customized-Off-The-Shelf”. That is often the situation with software not originally designed for governments. This misunderstanding points to problems associated with attempting to use business software in the public sector.

Configuration and cloud support forms part of the 2013 Gartner Group⁴ definition of “postmodern” enterprise software that adapts easily to changing requirements. This configuration approach has been validated recently with numerous vendors building Low-Code/No-Code suites supporting Business Process Management (BPM) needs.

How is a FreeBalance GRP Implementation Different from Alternatives?

Government Resource Planning (GRP) implementations for government Financial Management Information Systems (FMIS) differ from alternatives such as Enterprise Resource Planning (ERP) systems designed for the private sector, and bespoke systems. GRP software, like the

² <https://www.freebalance.com/public-financial-management/erp-in-government-fail/>

³ <https://freebalance.com/public-financial-management/lessons-learned-calculating-the-total-cost-of-ownership-financial-sustainability-for-government-resource-planning/>

⁴ <https://freebalance.com/open-government/much-more-post-modern-to-post-modern-erp/>

FreeBalance Accountability Suite™, is enterprise-class software designed exclusively for governments.

Context: government FMIS projects are *transformational*. FMIS is not a back-office technical initiative. FMIS projects transform financial management and government organizations.

- **Human Capacity Gaps:** New sophisticated software, combined with upgraded fiscal processes, can tax civil service capabilities.
- **Organizational Change:** Financial management automation, controls, and reporting replaces manual and legacy technology processes disrupts job requirements, hierarchical structures, and power relations - especially the use of technology to enforce accountability.
- **Legal Reform Change:** Public financial reform requires legal and statutory reform that further disrupts job requirements, hierarchical structures, and power relations - especially around fiscal transparency.
- **Comprehensive Impact:** Financial software rolls out across all government entities compounding capacity and change issues, while disrupting perceived organizational autonomy.

Government FMIS Is Transformational

Any government FMIS project represents high transformation risk with potentially high transformation rewards. Among the benefits achieved through PFM reform supported by software automation include:

- Transparency and accountability to reduce fraud⁵ and corruption⁶
- Improved allocation of budgets⁷
- Improved spending efficiency and effectiveness⁸
- More credible budgets⁹
- Improved fiscal discipline¹⁰

FreeBalance's exclusive focus on Public Financial Management enabled the company to understand this transformational promise for government FMIS. **The result:** software and

⁵ United States Agency for International Development: https://pdf.usaid.gov/pdf_docs/PNADK595.pdf

⁶ U4 Anti-Corruption Resource Centre: <https://www.u4.no/publications/the-implementation-of-integrated-financial-management-systems-ifmis/pdf>

⁷ World Bank: <https://openknowledge.worldbank.org/handle/10986/29222>

⁸ McKinsey: <https://www.mckinsey.com/industries/public-sector/our-insights/how-the-public-sector-fits-in-the-productivity-puzzle>

⁹ International Budget Partnership: <https://www.internationalbudget.org/2018/07/why-budget-credibility-matters/>

¹⁰ PEFA Secretariat: <https://www.pefa.org/resources>

implementation methodology designed to optimize transformational benefits while minimizing risks.

Global GRP implementations by FreeBalance differ from traditional approaches by:

1. **Governance:** Accountable product fit and project success with FreeBalance as software provider and implementation partner.
2. **Glocal:** Optimal costs and improved government-specific effectiveness by combining FreeBalance international and local project staff.
3. **Sustainability:** Affordability across many years for fiscal sustainability, and ease of adaptation to support future modernization for reform sustainability.

Many providers of FMIS solutions, who do not have GRP software, often claim similar benefits. Our analysis for these five differentiators is to describe:

- **Traditional Approach:** legacy, or traditional, approach to FMIS approach
- **Bespoke Context:** reasoning for the legacy approach for custom-developed FMIS
- **ERP Context:** reasoning for the legacy approach for ERP software
- **GRP Context:** reasons why GRP software enables more effective approaches
- **FreeBalance Approach:** approach used by FreeBalance



Introduction to the FreeBalance Methodology

How Did the FreeBalance Singular Focus Lead to a Government-Specific Methodology?

Vendors who build custom-developed solutions or ERP software used for many industries often see the similarities among these “vertical markets”. The singular focus by FreeBalance on PFM resulted in seeing the wide functionality and methodology differences between the public and private sectors. The FreeBalance Accountability Suite™, the first global GRP implemented

at national and sub-national levels, is one result of this singular focus. FreeBalance government customers benefit from the public sector GRP design.

FreeBalance government customers also benefit from the PFM design of the A- i^3 + qM methodology. Developed over three decades, A- i^3 + qM leverages capabilities of the FreeBalance Accountability Platform™, the underlying technology of the FreeBalance Accountability Suite™.

FreeBalance is not a software vendor that focuses on government financials. Rather, **FreeBalance is a purpose-led organization dedicated to improving citizen wellbeing and combatting corruption around the world** through its PFM software. The company also provides advisory, implementation and sustainability services globally.

Unlike most COTS vendors, FreeBalance is involved in every FreeBalance Accountability Suite™ implementation. FreeBalance acts as the prime contractor or is part of a joint venture. This ensures that the company learns from implementations to improve processes.

As a purpose-led organization, FreeBalance focuses on financial and reform sustainability. This “customers for life” vision covers product and methodology design to reduce implementation and maintenance costs while facilitating future reform. The result of this focus has been international acknowledgement of FreeBalance as a global PFM practice leader. The singular focus embeds FreeBalance in the global PFM community to inform strategy, and to question conventional thinking.

What is A- i^3 + qM ?

The design of A- i^3 + qM is predicated on the notion that many so-called project “best practices” are not appropriate in the government or PFM contexts. A- i^3 + qM challenges conventional thinking.

FreeBalance’s accelerated, integrated, iterative, implementation quality management methodology was designed exclusively for governments consisting of:

- **Accelerated** by eliminating as many legacy, waterfall processes that lead to project problems. This includes unnecessary documentation and detailed project plans, in favour of workshops and short process steps. Team sizes are kept small to enable client communications and reduce coordination overhead.
- **Integrated** through a single methodology to support development and services implementation. This is integrated with customer requirements through the customer-centric processes. This provides transparency between the customer staff, the implementers, and the development team. Implementation and product development teams are integrated following DevOps practices.

- **Iterative** to be responsive to customer and implementation changes using phases. The methodology leverages the best of proven “lean” software development and services methodologies with workshops, short iterations, user stories, milestones and the ability to show progress. These techniques are extended beyond the development organization to implementation services leveraging productivity gains and ability to react to customer requirements.
- **Implementation**-focused with good practice templates and proven program management processes. This methodology is focused on the success of the customer implementation, rather than a software release that achieves internal or arbitrary goals. Implementation and product development are managed via a Program Management Office.
- **Quality** approach ensures that the software is released and supported meeting Commercial Off-the-Shelf (COTS) good practices with unit, system, stress and regression testing. Quality is integrated with implementation where FreeBalance tests based on customer environments.

What Makes A-i³+qM Different?

A-i³+qM is part of the FreeBalance ISO-9001:2015 certification. It is a comprehensive methodology covering the entire PFM and FMIS lifecycle from prior to proposal development to customer sustainability. A-i³+qM consists of:

- **Repeatability** through decomposing the PFM lifecycle to over 250 tools and templates.
- **Government centric** analytical and benchmarking tools to support PFM reform roadmaps.
- **Good practices** implementation approach with appropriate configurations meeting government context and capacity.
- **Agile practices** through staging proven scientific commercial practices that increase implementation success rates, overcome uncertainty, and improve communications.
- **PFM practices** developed over three decades of experience that reflect the unique characteristics of GRP implementations and customer engagement, including from the FreeBalance International Steering Committee.
- **Proven tool** leveraging commercially available and leading government methods adapted for GRP implementations.



- **Integrated product and project methodology** to accelerate delivery, enables adapting software to meet needs, and eliminates the problem of orphan code through fully commercially supported customization.
- **Product adaptation** to facilitate implementations including localization, documentation, and configuration methods.
- **Transformational focus** with an emphasis on government capacity building and organizational change management.

A-i³+qM PFM Practice Approach

A-i³+qM tools, templates, canvases, and blueprints cover the PFM lifecycle:

1. **Project Preparation** to ensure a common understanding of objectives, success factors, scope, and resources.
2. **Country and Government Analysis** to determine appropriate good practices and support reform strategies.
3. **Technology Analysis** to identify technology needs, practices, upgrading, and integration needs.
4. **Project Governance** to support vendor and client accountability, project communications and decision-making.
5. **Product Governance** to enable configuration and customization decisions, including avoidance of poor practices and manual steps.
6. **Sustainability** to support future PFM reform, upgrading, capacity building, and knowledge management.

A-i³+qM Lifecycle Support

Preparation	Country Analysis	Technology Analysis	Project Governance	Product Governance	Sustainability
Project Preparation	Country Context	Transform Capabilities	Program Management	System Blueprints	Product Support
Product Preparation	Business Context	GovTech Needs	Implement Procedures	Config and Workflow	Learning Events
Capacity Building	Citizen Context	GRP Requirements	Process Management	Custom Development	Capacity Building
Change Management	PFM Context	ICT Needs and Processes	Project Sign Offs	Testing and Acceptance	Strategic Support

The FreeBalance Good Practice Approach to Government Financial Management Information Systems

1. Project Governance

Traditional Approach

Project governance structures can be very complex in FMIS implementations because of the mix of government, funder, and provider stakeholders. This structure is further complicated by differing incentives among stakeholders.

The good practice of setting up a program management office (day-to-day management) with a project steering committee (oversight and important decisions) is usually implemented in all scenarios.

Other project governance good practices common among FMIS approaches include:

- Ensure leadership commitment.
- Provide dedicated government project teams authorized to make decisions.
- Engage stakeholders and user early and often.
- Recognize the transformational nature of FMIS that requires finance ministry oversight, not just technology oversight.
- Focus on outcomes rather than the project schedule, especially when new evidence is uncovered.
- Plan for change resistance and continuous capacity building.

Bespoke Context

Prime Consideration: Custom-developed, or “bespoke”, projects include many considerations including the selection of technology platforms, architectures, and development methods.

- *Therefore:* granular project management is required with oversight and traceability from high level requirements to individual code quality.

Governments often select technology platforms for bespoke projects even when software outsourcing is contracted. In other words, there is limited flexibility for expert firms to select technologies that are more likely to succeed.

Governments require minimum expertise from software development outsourcers and individual developers. Education, experience and recognizable certifications for software tools, quality, and project management.

Rationale: This practice of specifying skill levels has been considered a “best practice”.

- *Theory:* certifications validate skill levels, meaning that risk is reduced, as is the need for granular oversight.
- *Reality:* certifications do not validate skills in understanding unique government needs, nor validate the ability to manage projects within government with so many stakeholders; while risk levels are far higher in bespoke projects than COTS (refactoring when specifications found to inaccurate, product quality given the lack of testing compared to commercial options, difficulties to engineer for future change, etc.).

ERP Context

Prime Consideration: ERP manufacturers are rarely part of FMIS project implementation governance structures. Governments deal directly with systems integration firms who are authorized to manage projects by ERP manufacturers. Systems integrators have an incentive to add billable hours for code customization that is often unnecessary. Yet, project timeliness and maintainability are enabled by reducing customization.

- *Therefore:* project management focus on reducing code customization is critical.

ERP software was developed for the private sectors. Public sector functionality has been added to these product suites. Code customization will be required because governments need legal reform to support many standard processes in ERP software.

Governments require significant design up front for bespoke and ERP options. A “waterfall” project management approach is typically used consisting of documenting:

- *As-Is* describing how public financial functions are currently processed, what software applications are used, benefits and problems.
- *To-Be* describing how functions will be improved, problems overcome, aspirations achieved, and recent legal reform.
- *Fit-Gap* describing the degree of fit with COTS software, and how gaps will be overcome through code customization.
- *Software Requirements* with full customization specifications.

Each stage is approved using the governance structure. Agile methods for managing ERP projects is not considered a helpful practice because of the downstream negative impact of any code developed that will need refactoring.

Rationale: This waterfall method is considered a “best practice” for any ERP implementation.

- *Theory:* requirements can be known during design, fully articulated and understood, with limited downstream changes.
- *Reality:* design requirements are often incorrect by not fully understanding informal processes, complex documentation is often misunderstood, and the time required to complete documentation and sign-offs increases change resistance and demands for unnecessary code customization.

Governments attempt to overcome capacity constraints by hiring third party consultants to provide oversight.

Rationale: Use of PFM expert consultants to help government oversight of ERP projects is considered a “best practice”.

- *Theory:* PFM consultants have experience in many similar projects and understand the capabilities of ERP packages.
- *Reality:* Significant risk is experienced in many governments as consultants make decisions without fully understanding contexts, demand unnecessary documentation and meetings to delay projects, or attempt to increase billable hours.

GRP Context

Prime Consideration: GRP implementations almost always include the manufacturer as part of the governance structure.

- *Therefore:* projects benefit from the combined product and domain knowledge of GRP providers.

Constraint: Project governance waterfall methods are imposed.

- *Theory:* all COTS applications are similar with the same limitations therefore rigid waterfall processes need to be imposed.
- *Reality:* GRP applications are highly configurable meaning that most design documentation is useless when functionality can be demonstrated in workshops, so imposing waterfall practices results all of the problems associated with ERP implementations except that the configuration and customization phase is much faster.

Constraint: GRP manufacturers should not be part of the governance structure.

- *Theory:* GRP providers have incentives to limit scope.

- *Reality*: GRP providers have an incentive to limit unnecessary scope, but an incentive to encourage necessary scope improvements so that products will provide more comprehensive functionality with other governments.

FreeBalance Approach

Context: Vendor accountability is improved when the GRP manufacturer is also involved in implementation and is part of the governance structure.

Government and FreeBalance incentives align. FreeBalance is committed to improving needed product functionality without incentives to drive up billable hours because of the negative impact of services revenue for software company valuations.

The configuration nature of the FreeBalance Accountability Suite™ supports agile implementation. No-code configuration and low-code workflow can be adapted with no refactoring. There is no need to provide significant *as-is* or *to-be* documentation when results are fully demonstrable. Interfaces and reports can also be implemented iteratively.

More rigid processes for custom development are recommended by FreeBalance, although requirements and software change management processes remain agile.

2. 'Glocal' Team Approach

Traditional Approach

Systems integration firms typically deliver government FMIS projects. These firms have incentives to increase billable hours. Expertise in these firms is often compartmentalized.

Bespoke Context

Prime Consideration: Custom-developed or “bespoke” projects are complex. Requirements and specifications need to be developed. Technology platforms need to be selected.

- *Therefore*: significant software technology skills required covering architecture, design, documentation, development environments, programming, code standards, code reviews, testing, quality assurance, and release (some of these elements can be certified) - augmented by public finance domain knowledge.

Custom-developed projects are most often developed by systems integration firms primarily using **local** country personnel, especially in Emerging Market and Development Economy (EMDE) countries. The staff complement includes software developers and subject matter experts. These experts are often deeply knowledgeable about PFM in countries, but often

unfamiliar with the broad range of potential future reforms. Meanwhile, software developers focus on containing scope, often “hard-coding” functionality.

The lack of **global** expertise limits project success rates. Successfully implemented custom systems are rarely resilient to modernization.

Rationale: This practice of local providers has been considered a “best practice”.

- *Theory:* local IT capacity will be built and source code provided to the government.
- *Reality:* governments struggle with numerous financial software systems with different technology platforms, architectures, and metadata, while source code ownership enables future fraud, and reduces code quality for every additional customization.

ERP Context

Prime Consideration: ERP implementations are complex requiring understanding full requirements to eliminate unneeded private sector functionality while developing specifications for customized code. Systems integrators, rather than ERP manufacturers, provide code customization.

- *Therefore:* significant knowledge of ERP product, and customization required, including software development good practices (some elements can be certified by the ERP manufacturer), with PFM knowledge to eliminate private sector functionality.

ERP systems are usually implemented by global or large regional systems integrators in (EMDE) countries. These integrators leverage **global** experts, often at high rates, to run projects and provide subject matter expertise. These experts include ERP specialists with limited government knowledge or government knowledge in other countries. Subject matter experts are most often familiar with PFM in more advanced countries. Large teams with silos of expertise are deployed, requiring complex project coordination.

Local resources are often used to pad out projects, develop documentation, and provide some government context.

Rationale: The use of systems integrators for government FMIS implementations is considered a “best practice”.

- *Theory:* systems integrators are “independent”, and best able to provide objective advice.
- *Reality:* systems integrators build vendor practices, there is no independence.

GRP Context

Prime Consideration: GRP implementations require limited code customization because these systems are highly configurable.

- *Therefore:* PFM understanding is most important, products can be learned because of configuration capabilities, where any code customization (beyond interfaces and reports that do not affect the main code) is typically handled by the software manufacturer.

Constraint: Project methodologies used in bespoke and ERP implementations are often imposed on GRP providers.

- *Theory:* project management “best practices” should apply to any FMIS implementation regardless of solution type, beginning with a thorough design.
- *Reality:* standard FMIS project management practices lead to overly customized systems, unnecessary project documentation, and increased change resistance - all of which can be avoided with GRP *but not with ERP or bespoke alternatives.*

FreeBalance Approach

Context: there is reason why FreeBalance government customers enjoy better success rates than alternatives (based on meeting time, scope, budget, goals and sustainability criteria)...

FreeBalance development commits to customized code in the FreeBalance Accountability Suite™ - this code is fully supported (rather than “orphan” code developed by systems integrators).

FreeBalance’s **global**, multicultural staff kick off projects in countries, leveraging experience in similar countries. FreeBalance hires **local** staff and sets up **local** project offices. Capacity is built for new staff, mentored by FreeBalance **global** experts. **Local** staff provide country and cultural perspective. This staff takes more responsibility throughout the project and provides post-implementation sustainable support. A by-product of this approach is lower costs thanks to **local** staff rates and lower transportation costs.

Individual FreeBalance consultants typically have project management, product, PFM, and information technology expertise. This enables smaller and more effective teams with less project coordination overhead.

Knowledge of similar circumstances enables FreeBalance project teams to better align to real needs because requirements provided during tendering are rarely accurate, complete, or reflect informal processes. Some project aspirations are unrealistic during project lifetimes.

3. Sustainability

Traditional Approach

FMIS implementations are considered projects. Projects end, typically after about five years. These projects are considered “turnkey” - governments are expected to take over managing FMIS implementations. Many implementations are not sustainable by governments.

- *Financial sustainability*: affordability to operate, maintain, upgrade, update, and train - a high Total Cost of Ownership (TCO).
- *Reform sustainability*: adaptability to future process modernization and legal reform.

Bespoke Context

Prime Consideration: Governments operate as software development organizations with product management, software engineering, and quality assurance disciplines.

- *Therefore*: product development capacity needs to be built, and key employees need to be retained.

Rationale: The creation of software development capacity in government is a recommended practice for some governments.

- *Theory*: overall costs will be reduced by avoiding onerous COTS software maintenance licenses and developing only what is necessary, while giving governments more control to support reform and modernization.
- *Reality*: costs to ramp up software development capacity and retain employees is most often much more expensive than leveraging COTS while compromising quality = challenge to financial sustainability; adapting source code to meet reform and modernization is often more time-consuming than reconfiguring in COTS software = challenge to reform sustainability.

Bespoke core FMIS, payroll, human resources, procurement, assets, and budget planning systems in government often use different technology platforms (across numerous technology eras) and do not share metadata or controls. This compromises interoperability while adding complexity for civil servants using more than one application.

Rationale: The development of silo custom-developed applications is considered an acceptable practice.

- *Theory*: silo applications align with primarily standalone functionality while supporting PFM reform in that standalone domain without much impact to other FMIS functions.

- *Reality:* there is no such thing as primarily standalone functionality in government financials with some financial applications requiring tight metadata, controls, and reporting integration causing errors, introducing manual processes, enabling fraud = challenges financial sustainability; while legal reform in one finance domain almost always requires changes in other finance domains = challenges reform sustainability.

ERP Context

Prime Consideration: ERP systems are highly complex to maintain. Significant training is required for users and administrators, particularly for those who manage customized code. Governments often require building software engineering teams, similar to the bespoke option, at a slightly smaller scale.

ERP vendors force upgrades to new software versions. (Or support previous software versions at higher maintenance costs.) Every upgrade requires an analysis of all custom code that may need to be changed, and any new functionality that may not be compliant with government regulations.

- *Therefore:* ERP capacity needs to be built in government otherwise external consultants will be required for operational and advisory functions.

Rationale: The development of government “shared services” ERP organizations with requisite capabilities needs to be built.

- *Theory:* shared services organizations pool ERP capabilities for product operation, maintenance, upgrading, maintenance, and testing.
- *Reality:* shared services organizations experience difficulty in retaining capable employees, often requiring hiring external consultants = challenges financial sustainability; while often lacking the PFM knowledge to support reform, and integration = challenges reform sustainability.

GRP Context

Prime Consideration: GRP is far less complex than custom-developed or ERP options. GRP systems require PFM knowledge and understanding of government processes. Basic information technology skills are required to manage these systems. Configuration is the primary method to support reform and modernization.

- *Therefore:* the GRP maintenance and management footprint is contained = enables financial sustainability; while reform is “progressively activated” = enables reform sustainability.

Constraint: Governments often set up GRP support organizations that reflect the needs of the bespoke or ERP context.

- *Theory:* all software, regardless of type, requires similar support mechanisms, personnel, and capacity.
- *Reality:* GRP does not require significant overhead.

FreeBalance Approach

Context: product sustainability is a FreeBalance mission as a purpose-driven company. FreeBalance supports financial and reform sustainability by:

- Government rules, translation flexibility, additional fields, terminology, and custom help supported through parameters and configuration.
- Process workflow supported through a low-code tool.
- Fully supporting any customized code (and, making new functions available to all countries).
- Capacity building and mentoring programs, including certifications, an online academy, custom courses, and engagement through the FreeBalance International Steering Committee to share good practices.
- Value-based pricing model making additional software licenses affordable.
- Strategic sustainability services available to augment government over short periods of time while building capacity.
- No forced upgrades, although support for the latest versions of middleware may necessitate upgrades.
- Open system and open-source support providing governments with middleware choices to reduce technology costs.

FreeBalance Sustainability Services



Capacity Building

Supports more than software training and includes:

- IT Technical Training
- Adaptable Training
- Advisory Services
- eLearning



Capacity Enhancement

These services are designed to reduce the dependency on consultants through:

- Onsite Help Desk
- Onsite Mentoring
- Onsite Administration
- SWAT Teams



Product Maintenance

Supports new versions and fixes including:

- Quality Enhancements
- Product Upgrades
- Joint Application Development



Solution Support

Includes:

- Case Management
- Service Level Agreements
- Knowledge Base
- Customer Metrics

Practical Advice on Optimizing Your FreeBalance Project

Lessons Learned From FreeBalance Project Audits

FreeBalance conducts internal Financial Management Information System (FMIS) implementation audits. These occur at major project milestones. Anonymous surveys are used. The process has improved over time with over 100 performance indicators. Some of these indicators are fully under company services controls. Most rely on FreeBalance teams working with government project teams.

Context: many of the project audit performance indicators are predicated on the capabilities of GRP software designed exclusively for government, and the unique features of the FreeBalance Accountability Suite™.

This internal audit process helps FreeBalance to improve project successes. It informs governments who lack the experience of implementing GRP.

Project audit performance indicators are arranged in seven categories. Ratings for each indicator are calculated and documented. The insight gathered identifies success potential overall and by category.

Critical FreeBalance Accountability Suite™ Implementation Performance Indicators



Project Initiation Performance Indicators

1. **Common project understanding** among government and implementation teams facilitates decision-making, particularly when success factors and project outcomes are well-understood and agreed upon.
2. **Dedicated government project teams** are critical to communicating requirements, uncovering informal processes, and preparing for change.
3. **Government project team product training** helps eliminate unnecessary code customization by anchoring projects on how software meets objectives, and how unexpected functions can add value.

4. **Agile project methods** enables adjusting to public finance realities, while rigid waterfall processes introduces risk - including gaps between documented requirements and real needs that are exposed during the project.



Program Management Performance Indicators

1. **Governance structures** must include the software manufacturer in the steering committee and the program management office to ensure commitment while leveraging lessons in similar circumstances.
2. **Government project leadership** for success must be driven by government professionals, rather than external consultants, and should include civil servants outside central agencies to provide insight on informal practices.
3. **Scope should be managed** through formal analysis, even in agile processes, to focus projects on public finance priorities.
4. **Timely decisions** from steering committees, program management offices, vendors, and government project teams are required to meet schedules and eliminate unnecessary lag times (a corollary to this is providing timely information rather than “at the last minute” because it takes time to evaluate and analyze).



Change and Capacity Management Performance Indicators

1. **Stakeholder engagement** across the government (leadership, domain experts, users), donor funders, and civil society organizations reduces change resistance while uncovering deeper understanding of needs.
2. **Integral change processes** in all project activities including the use of workshops, interviews, agile management, feedback mechanisms, and communications that demonstrates quick wins, and other accomplishments to generate project buy-in.
3. **Localization** of language, terminology, and documentation localization facilitates transition users to new systems, including support for the unique language variation used, unique national languages, unique government terminology, with help and documentation showing government processes and screens to leverage existing capabilities.
4. **Expert mentoring** by FreeBalance and any vendors who have GRP and PFM expertise in similar contexts, augmented by training that extends beyond products to PFM, project management, changes management, and ICT to build capacity in government.



Needs Analysis Performance Indicators

1. **Workshops** using agile methods engages stakeholders to improve the quality of requirements, while iterative configurations demonstrate compliance with those needs, eliminating the need for extensive documentation except for code customization.
2. **Eliminate unnecessary functions** from “as-is” processes that reflect deficiencies or unnecessary constrained in previous software including eliminating manual processes and controls through automation.
3. **Prioritization** should represent more than central concerns because line ministry and regional needs should be accommodated.
4. **Good practices** approach reflecting the capacity and public finance history in governments should be used, rather than trying to impose inappropriate and complex “best practices” such as accrual accounting, result-based budgeting, or performance appraisal, except in governments with capacity.



Public Financial Management Approach Performance Indicators

1. **Government context** should be used to determine which functions have the most positive impact on public finances for prioritization.
2. **Progressive activation** phases should be used to transition from good to better practices over time as capacity is built (leveraging GRP configuration capabilities).
3. **Commitment controls** should be implemented because that is what makes PFM different from private sector accounting, and ensures legal spending supporting budget laws (this can be progressively activated, beginning with simple controls at the purchase order level before adding more controls, and adding controls at the purchase requisition level).
4. **Aggregate budget control** is considered a good practice, while line-item controls is considered a poor practice, because of the need to make budget transfers that are not material to the budget or the budget law (line-item warnings could be implemented in lower-capacity governments).



ICT Approach Performance Indicators

1. **Effective IT practices** are required for managing data centres hosting GRP applications including defined systems management procedures including monitoring, maintenance, and patch management to ensure system availability, performance, and scalability.
2. **Information security** processes are particularly important in government data centres including segregation of duties, physical security measures, antivirus, firewalls, intrusion

detection, cybersecurity user training, and audits to prevent manipulation or release of classified information.

3. **Good integration practices** between GRP systems and other financial subsystems should be leveraged including use of web services and the management of the API lifecycle, while poor practices such as manual uploads, direct database calls, stored procedures, and flat files should be avoided.
4. **Separated testing** helps accelerate implementations, with configuration sign-offs through demonstrations, reports tested individually, integration tested separately, before full User Acceptance Testing that including configuration, custom reports, integration, and any product code customization.



Pandemic Response Performance Indicators

1. **Recognition of limitations and opportunities** during the pandemic helps to adjust schedules and deliverables, sometimes with some deliverables taking less time.
2. **Sufficient bandwidth** in countries to enable remote video conferencing, testing, and demonstrations.
3. **Support for remote workspaces** like shared virtual room enables oversight in project progress.
4. **Global vendor capabilities** can be leveraged remotely that reduces travel costs and time, while mitigating any lack of local resources because the pandemic makes in-country hiring difficult, and local hires may contract COVID-19.

GRP Thinking vs. Conventional Thinking

Many of the GRP Project Audit Performance Indicators are counter-intuitive to those versed in legacy project management approaches. That's the point behind these Performance Indicators: *the recognition that conventional thinking reduces implementation success rates.*

Conventional project management approaches assume very little differences among:

- **Physical and virtual** projects – the process of building structures is highly predictable, while software can be done in many ways.
- **Knowable and less knowable** needs - some projects can start with an expectation of comprehensive understanding, while FMIS projects begin with gaps between tender requirements, and real requirements.
- **Complicated and complex** scope - some projects require technical expertise to succeed, while FMIS projects are transformational and complex beyond technical to significant change, communications, and capacity characteristics.

Conclusions

Large projects succeed when context is understood. Generic project practices are often insufficient to optimize success in many contexts. Some established domain “best practices” add project risks in many contexts.

- **Change Context:** FMIS implementations are *transformational*, requiring far more attention and resources than typical large technology projects.
- **Difficulty Context:** FMIS scope extends beyond *complicated* technical projects to multi-stakeholder *complex* programs with significant *political* consequences requiring far more communication than large business transformation projects.
- **Virtual Context:** FMIS is software with far more scope change options, and far less predictability than physical construction from which most project management practices originate.
- **Government Context:** FMIS must support legal statutes while supporting future PFM reform, rather than adopting industry best practices.

The good news is that GRP software, like the FreeBalance Accountability Suite™, is designed for the FMIS context. Software designed for the global PFM context is insufficient for implementation success. Project practices also need to reflect the government PFM domain. These practices, when integrated together to form a methodology that reflect GRP capabilities, optimizes success potential.

Appendix A

Financial Management Information System (FMIS) Implementation Success Criteria

GRP, like the FreeBalance Accountability Platform™, is Commercial-Off-The-Shelf (COTS) software designed exclusively for governments. Yet, how can governments who use software designed for the private sector, ERP, or custom-developed code improve success rates?

How Can Governments Not Using GRP Improve Success Rates?

As a global Public Financial Management (PFM) practice leader, FreeBalance has developed over 250 reusable tools for improving the success and predictability of advisory, implementation, and sustainability services. These are part of the FreeBalance A-i³+qM methodology.

Among the evaluation tools is FreeBalance's **FMIS Checklist Template**¹¹ to evaluate current FMIS implementations to prioritize improvements.

Governments considering the replacement of an FMIS or financial subsystems like procurement, tax administration, or fixed assets can leverage the **FMIS Optimization Template**.

What Are the Common FMIS Implementation Success Criteria?

The FMIS Optimization Template identifies four success pillars. Each pillar has four categories. Each category has between four and ten elements:

Country

- Political Enabling Environment (8)
- Human Capacity (8)
- Technology Readiness (6)
- Social Cultural Enabling Environment (4)

Government

- Leadership Buy-In (10)
- Positive Incentives (10)
- Project Capacity (8)
- Change Readiness (10)

¹¹ Appendix B

Project

- Project Practices (10)
- PFM Practices (10)
- Requirements Alignment (10)
- Customization Avoidance (6)

Vendor

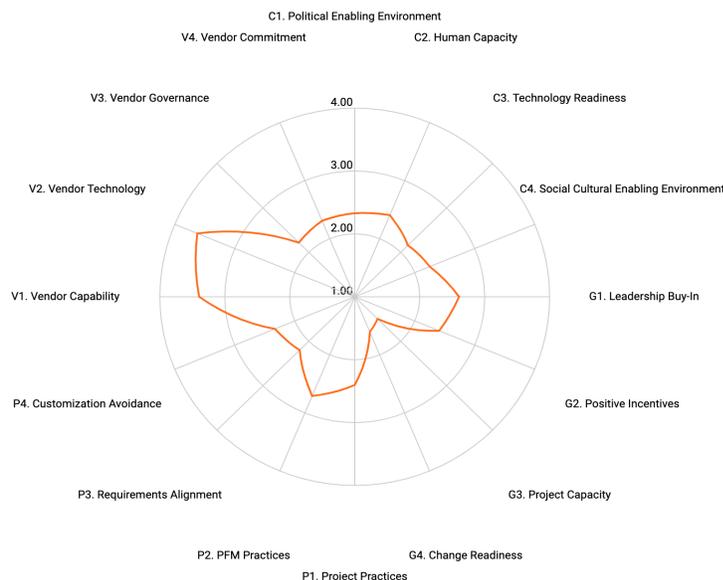
- Vendor Capability (5)
- Vendor Technology (8)
- Vendor Governance (5)
- Vendor Commitment (5)

How Is the FMIS Optimization Template Used?

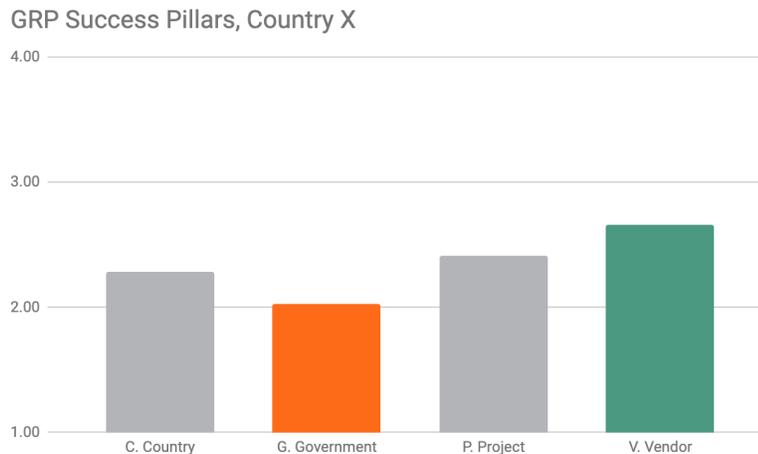
Each element of the template provides four ordinal criteria ranked from A to D. Scores are rolled up to subcategories and categories using the formula of $D=1$ and $A=4$. (This is somewhat similar to how Public Expenditure and Financial Accountability assessments are compared.)

The template provides early warning to governments before the FMIS acquisition process begins. Governments can use the first three pillars to evaluate preparedness and improve success likelihood.

For example, the following sample radar chart suggests that categories (G3) Project Capacity and (G4) Change Readiness are ranked low, representing high project risk of about D+. Governments take significant risk when any category is assessed at below 2, or C.



Categories ranked above 3 are more optimal, while all pillars should be ranked above 2.5. This is not the case for this example. The vendor ranking is above 2.5 in the example. The vendor ranking score could be used for acquisition criteria and to improve project governance.



Where Did the FMIS Optimization Criteria Originate From?

100 of the 123 success elements originate from expert evaluation and audit material. Each element references the source or sources used. 23 success elements come specifically from FreeBalance experience, as do the A to D descriptions.

Sources used include:

- Auditor General of Canada
- Brookings Institution
- Canada Senate Committee
- Commonwealth Secretariat
- Economist Intelligence Unit
- Gartner Group
- Institute for Defence Analytics
- International Monetary Fund
- International Telecommunications Union
- Organization for Economic Cooperation and Development
- Mitre
- Public Expenditure and Financial Accountability Secretariat
- U4 Anti-Corruption Resource Centre
- United Nations
- United States Agency for International Development

- United States Government Accountability Office
- United States Government Services Agency
- World Economic Forum
- World Bank

The **FMIS Optimization Template** is available by contacting FreeBalance at info@freebalance.com.

Appendix B

Benchmarking Financial Management Information Systems

How Can Governments Assess Their Current FMIS State?

International PFM assessments, like Public Expenditure and Financial Accountability (PEFA), provide little guidance on prioritizing FMIS technology upgrade or replacement. These assessments are technology neutral with limited visibility on the connection between FMIS and improving PFM outcomes.

One exception to this observation is Appendix C from *Ensuring Better PFM Outcomes with FMIS Investments: An Operational Guidance Note for FMIS Project Teams Designing and Implementing, with FMIS Solutions*¹² published by the **World Bank**. This resource, provided by Ali Hashim, Khuram Farooq, and Moritz Piatti-Fünfkirchen is an excellent benchmark starting point.

As part of the FreeBalance A-i³+qM methodology, FreeBalance has developed the **FMIS Checklist Template**. This tool builds on the excellent work by World Bank staff to provide a more granular benchmark. Elements of the Commonwealth Secretariat *Public Financial Management Self-Assessment Tool* are also used. The World Bank structure is used.

Given the pace of digital change, the FreeBalance benchmark provides more elements for assessing information technology. There are more elements that assess whether FMIS public sector accounting functions can support PFM reform.

The **FMIS Checklist Template** consists of:

- 20 TSA elements
- 73 Core Functionality elements
- 62 Ancillary Feature elements
- 15 Coverage and Utilization elements
- 145 Technical Aspect elements

Color-coding in the template includes:

¹² <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/917121592283326885/ensuring-better-pfm-outcomes-with-fmis-investments-an-operational-guidance-note-for-fmis-project-teams-designing-and-implementing-fmis-solutions>

- **Black** for original World Bank content
- **Red** for Commonwealth Secretariat content
- **Green** for FreeBalance content

List of Questions to Assess the Status of the Treasury Single Account (TSA)		
EQ#	TSA Evaluation Questions	Country Response
Q1.1	1.1.1	Has a TSA been established?
	1.1.2	TSA acts as a consolidated Treasury Account is established for the consolidated fund
	1.1.3	Sub-consolidated fund account or zero balance account is established for each MDA.
	1.1.4	Are government funds deposited in a consolidated fund or control account?
	1.1.5	Where is the TSA located — central bank or private bank?
	1.1.6	The prompt production of periodic (usually monthly) bank reconciliation statement is in place and these are reviewed and signed off by nominated senior officers.
	1.1.7	Government domestic borrowing is only with recourse to the balance on the Treasury Single Account
	1.1.8	Multiple currencies are supported
	1.1.9	Does the FMIS support migration from multiple bank accounts to the TSA?

The **FMIS Checklist Template** is available by contacting FreeBalance at info@freebalance.com.