



Optimizing your agency's investment in SAP S4/HANA





Enterprise Resource Planning (ERP) as we know it today is quickly evolving into the Intelligent Enterprise of the future.

This is a pivotal challenge for federal agencies, which must continuously evolve their operations to keep pace with laws and mandates—as well as rapidly evolving technologies. For organizations focused on agency operations including agency financial management leaders, the need to modernize can seem daunting.

At CGI, we understand that making significant changes to solution architectures can be challenging, not least because of the significant investments that agencies make when choosing ERP systems, including federal financial management systems.

Federal financial management executives are in a unique position to make lasting changes by leveraging existing and new technology and tapping into the available enterprise data to solve these problems. CGI is one of the federal market leaders in financial management with deep domain expertise in financial practices, policies, processes, systems and operations. This, combined with our application of industry best practices from our 5,000+ global financial management clients, enable us to solve complex problems without unnecessary experimentation.

Leveraging SAP S4/HANA with CGI

SAP's S4/HANA ERP is one of several vendor systems where CGI provides expertise. Agencies considering the adoption of SAP S4/HANA to support their financial operations recognize the need for expert services to implement this new solution. Even agencies already leveraging the solution can benefit by engaging experts to help optimize its effectiveness within the agency ecosystem.

CGI has created our own built-for-federal ERP, Momentum, and has supported other ERP systems for years. Our 40-year domain expertise has given our experts unique understanding of the federal financial management challenge and enables us to provide mission-focused insights and guidance. Our experience also spans all major federal ERPs including SAP. We remain steadfast in our commitment to support existing and new SAP clients in the transformation to SAP S4/HANA, adoption of the SAP Cloud Strategy and the enablement of the Intelligent Enterprise.

SAP S4/HANA offers increased performance, an improved user experience, and real-time analytics to support agency decision-making. It still remains though that agencies are holding off on this move, unsure of how to migrate and transition, which clouds to use, and how to ensure that they get the biggest benefits.

This whitepaper is a roadmap for the safe and proactive deployment of SAP S4/HANA. In the following pages, we advise agency leaders on key considerations for adopting SAP S4/HANA or optimizing its use within your agency's ERP ecosystem.



SAP S4/HANA assessment

Leveraging S4/HANA within the federal agency ecosystem requires a careful and measured plan. CGI recommends an upfront assessment to identify key elements and proactively identify potential risks or issues.



Benefits

- Identifies the business advantages of the system update on a customer-by-customer basis
- Provides insight into the scope of the project and its impact on the organization
- Identifies possible project risks, schedules and impact on the entire system environment
- Helps to justify the investment to the organization and stakeholders
- Allows for better preparation for the project and ensures a smooth implementation phase for the system project

Assessment

There are two critical components of the assessment for comprehensive results: the technical and the application level:

- At the technical level, we use both standard SAP tools and CGI-proven methods to scan the current system environment to identify potential problem areas, the level of complexity, and the system architectural requirements. We perform a fit gap analysis based on the business requirements and processes and identify options for fulfilling any gaps.
- At the application level, we work with financial management and IT stakeholders to determine the benefits S4/HANA provides. We develop the to-be business process documentation and make recommendations for process reengineering where needed.

Results

After completing the CGI S4/HANA Assessment, we share information with the agency to help plan and prepare for the next steps that may include:

- A description of the recommended change model
- Technical analysis
- Data cleansing
- Readiness assessment
- Implementation strategy
- Potential risks associated with the implementation
- Suggested timeline for the project
- A future-focused roadmap identifying the solutions and versions to consider over a desired timeframe

Brownfield migrations

A Brownfield project involves an in-place migration of an old SAP ERP production system to S4/HANA and immediately deploys it for use as soon as the conversion tasks are completed. Agencies currently using SAP will need to convert the current system into the new S4/HANA architecture using tailored conversions tools. Applying deep knowledge of federal financials, a systems integrator such as CGI can support the agency in converting current configurations, customizations, client extensions, data and structures from the old SAP system into the new SAP S4/HANA system.



Before beginning the migration project, the agency will need to:

- Clean up the old system of unused agency-specific customizations (so-called Z-Objects), unnecessary or unused master data, old or open receipts and all other functionality and data you do not want to import into the new S4/HANA system.

CGI's S4/HANA Assessment identifies the items that should be cleaned up from the old system before the start of the migration project.

Cleaning up the old system prior to migration can significantly reduce downtime, i.e. time the system is unavailable for use.

- Convert all customers and vendors into Business Partners. Note that the concepts of customers and vendors no longer appear in the traditional sense in the S4/HANA system; thus, handling them via traditional customers and vendors events (transactions) is no longer possible. The traditional model is replaced in the S4/HANA system by the Business Partner role, giving customers and vendors specific Business Partner profiles.

This conversion requires separate configuration and mapping procedures, which typically involves a configuration phase where the account groups, number sequences, data fields and plug-ins are defined and synced to their respective Business Partners. Only then can the Business Partner itself be deployed and configured, along with Customer Vendor Integration (CVI) mapping and configuration.

The cornerstone of a migration project's production deployment is often the downtime where all operational activities are either stopped or carried out using alternative methods. Within the federal landscape, downtime must be minimized – and zero downtime is often the goal. That can be accomplished with thorough preparation and planning.

New implementations (Greenfield)



With new implementations (Greenfield), an entirely new S4/HANA system is created based on the new system's standards and client demands. Only the agency's master and transaction data is imported from the old system. However, if, for example, old agency-specific customizations are to be imported from the old system, this is also possible with certain qualifications.

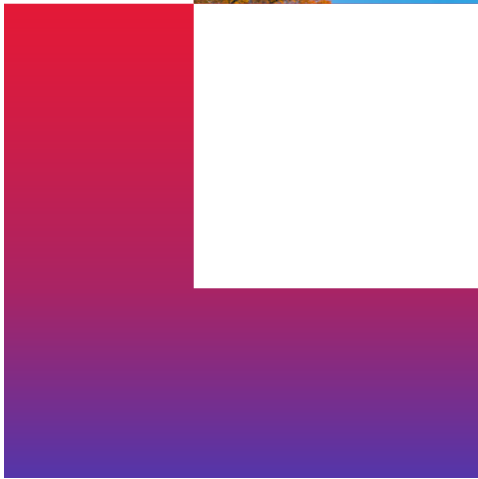
When do we apply a Greenfield approach?

- When moving from another vendor's system to SAP S4/HANA
- If the existing SAP system is very old, behind on updates, highly customized or otherwise in a status without a supported path for the migration option
- If the old system contains a large number of unused and outdated structures, functionalities, customizations, data or otherwise overly complex system environment
- If the cleanup and repair on the old system may require more work than starting over from scratch
- When you want the opportunity to consider processes and functionalities from a completely new point of view without being constrained by the old system or outdated functionalities

Federal mission partner of choice

CGI brings a rich history of delivering world-class services to senior financial executives and managers aimed at maximizing performance and efficiency in the U.S. defense, civilian, and intelligence agencies. Having supported hundreds of federal organizations across all 3 branches of government, we are one of the federal market leaders in financial management with deep domain expertise in financial practices, policies, processes, systems, and operations. This, combined with our application of industry best practices from our 5,000+ global financial management clients, serve to eliminate unnecessary experimentation when trying to solve complex problems.

Having developed our own ERP solution, Momentum, we have gained a deep insight into the nuances of federal financial management. We bring this perspective to our support of federal agency clients operating other ERP solutions including Oracle and SAP. We have developed SAP S4/HANA accelerators to enable more efficient migrations such as S4/HANA Assessment and CGI's Code Converter for Brownfield implementations; We have enabled agencies to leverage the benefits of SAP S4/HANA within an ecosystem including SAP ERP and non-SAP ERP technologies. Our goal—optimize your agency investments in technologies to deliver compliant and efficient financial management across the agency.



1900+

Federal financial management professionals with deep domain expertise

200+

Federal agencies and federally-funded non-profits across every cabinet-level agency supported

Keys to successful deployment



Our experience in both federal financial management and global ERP systems implementation informs our recommendations for deployment success:

- **Assess the initial situation:** Carefully determine the technical status and important processes of your current system.
- **Familiarize yourself with the new system:** Learn the features of the new system and the business requirements, and use the information to build a business plan for your organization.
- **Identify the risks:** Analyze the most critical functions of your system and determine where the potential risks are hiding.
- **Make a plan:** Based on the information collected, create a strong vision of the goals of the upgrade and how the transition process will be carried out.
- **Choose a suitable partner:** A smooth transition to the new S4/HANA system is made easier by planning the project from the start with a knowledgeable partner that already has practical experience in successful S4/HANA projects, like CGI.

Case in point

Seeking a single ERP solution to simplify and standardize processes, this global organization turned to CGI for a Greenfield implementation of SAP S4/HANA. Taking an iterative and agile approach, CGI enabled the pilot go-live in just 9 months. To support business needs, CGI architected a solution that leverages several S4/HANA modules as well as the SAP Business Warehouse on HANA for reporting and an open-source, API-centric integration framework. CGI's support for the client's transformation has helped achieve critical goals including eliminating nonstandard processes and customizations, strengthening controls, reducing time and effort associated with changes and upgrades, and improving the quality of data for decision-making.

The future is here: the realization of the Intelligent Enterprise

Organizations across the globe are leveraging SAP S4/HANA to harness data and gain insights that help drive their businesses and missions forward. The embedded analytics and the performance capabilities of SAP S4/HANA are key components to this transformational strategy.

Finance and accounting transformation are two vital application areas of SAP S4/HANA - and these two areas are foundational to the Intelligent Enterprise.

Today, both public and private sectors are using SAP S4/HANA to centralize and more tightly integrate disparate finance and accounting centers so that their organization is better able to support organizational change and meet the demands of the future.

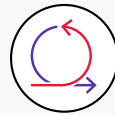
CGI Federal is ready to assist federal agencies in your Intelligent Enterprise journey.

Take the journey with CGI – and discover the advantages of SAP S4/HANA



50% less data volume

Due to a column-oriented in-memory database



100 times faster reporting

Enables robust, agile decisions



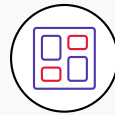
Integrated AI technology

Provides better insights and higher performance



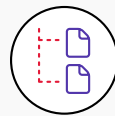
Extended real-time analysis

Better forecasts and faster decisions



Optimized data display

By eliminating confusing aggregates and indices



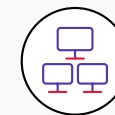
Competitive advantages and better workflows

With industry-specific business processes



High usability on all devices

Reduces errors, increases productivity



Flexible deployment options

Reduces full-time positions and ensures faster implementations



About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across hundreds of locations worldwide, we provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

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