



# WBSCM Update

*Providing nutritious food through a seamless, efficient, Web Based Supply Chain*

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## The Difference between COTS and ERP

In the premier edition of the WBSCM Update, we introduced two important concepts: COTS and ERP. These acronyms are small but may prove critical in defining Web Based Supply Chain Management, (WBSCM). Since the first phase of WBSCM is dedicated to choosing a software package, we wanted to explain these acronyms in more detail.

**COTS** stands for Commercial Off-The-Shelf. It is a term commonly used for software that is ready-made, packaged for general consumption, and available for sale or license to the public. Microsoft Office, Norton AntiVirus, and Turbo-Tax are all examples of COTS software.

In the earlier days of computers, most computer systems were built specifically for one purpose, like word processing or accounts payable. Today, COTS packages or products are often an economical alternative to in-house/custom developed software systems. Indeed, the typical motivation for using COTS is the reduction in overall system development costs for systems that meet general business requirements. For example, most organizations now buy MS Word for word processing. It is much cheaper and faster to install MS Word than to hire a team of programmers to create a unique system just to meet a need that is common to many end users. Many government agencies, in line with the Clinger-Cohen Act of 1996 (CCA), are now mandating COTS use due to the significant procurement, implementation, and maintenance cost savings they offer.

As is usually the case with any pro, there is a con: COTS software is not as customized to an organization's business processes. As a matter of fact, these packaged solutions are designed to fit multiple organizations with only slight customization. For example, PCIMS is custom designed and written, and works according to USDA specifications. PCIMS was designed with links to other systems, embedded complex calculations, and the capability to add features as needs arose. Because the WBSCM solution will use COTS software, future users have already begun to define the new package "must haves", or items that must exist for food distribution to continue with acceptable results. In fact, this was the focus of the February "To-Be" workshops.

Industry benchmarks of **COTS benefits** over custom system development include the following:

- Standardization reduces overall system development and maintenance costs
- One point of entry eliminates the need for multiple interfaces
- Increased system scalability, flexibility, reporting and data visibility

**ERP** stands for **Enterprise Resource Planning**. The WBSCM Team (comprised of SRA and USDA technical, functional and management groups) are considering ERP software packages to perform the planning, procurement, fulfillment, and finance functions in the WBSCM requirements.

According to Wikipedia®, the biggest free-content encyclopedia on the Internet, ERPs "integrate (or attempt to integrate) all data and processes of an organization into a unified system. A typical ERP system will use multiple components of computer software and hardware to achieve the integration. A key ingredient of most ERP systems is the use of a unified database to store data for the various system modules." That is, ERP systems are large, broad-scale applications that provide functionality in a single package that would normally be covered by two or more custom systems. For example, a software package that provides both payroll and accounting functions would be considered an ERP software package.

ERPs are large and complex, yet they are configured to fit clients' business processes without changing source code. They also offer the flexibility to extend enhancements, interfaces, and other features added to the core system functionality. However, the more customization that occurs with

implementation, the more difficult future upgrades and vendor maintenance become. Therefore, the WBSCM Team will use great care in determining which customizations are critical to keep USDA food distribution running smoothly. System users should plan to be flexible though. The overall cost savings and benefits, such as enabling USDA Personnel to focus on more value-added supply chain functions and less on administrative tasks, will outweigh the changes required to accommodate the:

- general to specific software customizations required to fit the "package" to USDA and
- limitations that arise due to cost/benefit analyses of features that can be included.

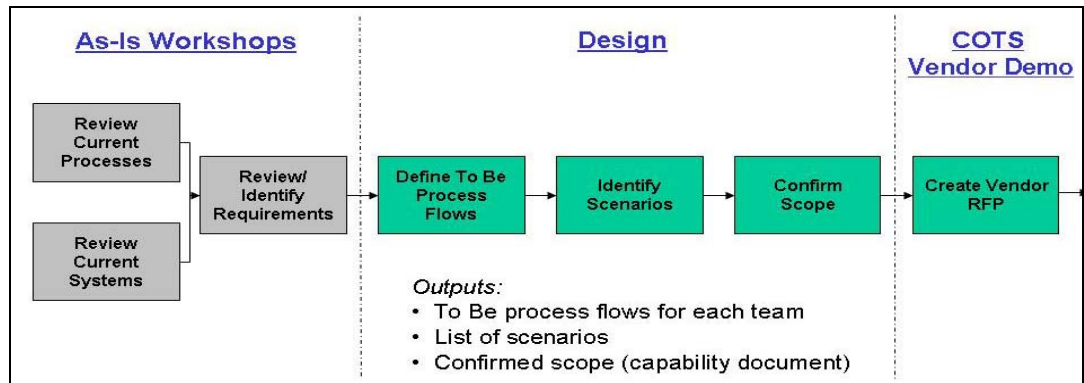
This is where confusion typically arises: not all COTS software products, like Microsoft Office, are ERPs. Most COTS products are built and sold to perform one function. However, due to ERP size and complexity, only a few companies build and sell them, making most ERPs COTS products.

## Progress to Date

The WBSCM Team completed gathering and analyzing requirements for the new system. Three major deliverables are being finalized: User Requirements, IT Requirements, and Global Design. Vendors have been invited to propose solutions and will demonstrate their systems to the team in June, leading to the ultimate software/system selection in July.

### Software Selection

The December/January "As Is" and the February "To Be" workshops resulted in valuable clarification of current USDA operations, definition of users' requirements for the WBSCM solution, and the scope of realistic business scenarios that span the planning, procurement, fulfillment, and finance areas. (See Figure 1 below.) All of this information was summarized and submitted via Request for Proposal (RFP) to software vendors in April. Based on the RFP, they will demonstrate their system solutions to the WBSCM team during June. SRA will then evaluate which solution best addresses USDA's needs and this phase will conclude with the COTS software selection.



**Figure 1.** COTS Selection Process.

The next phase begins as software installation and configuration begins, and the typical IT lifecycle proceeds with designing, building, testing, training, deploying, and ultimately, operating and maintaining (O&M) the system.

## Contact Information

If you have any questions or suggestions for WBSCM, please email us directly!

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