# Ariba - Project Monitoring and Control

## Managing Earned Value

*The e-procurement implementation project called Ariba was not going according to plan, Prakash, a consultant from Implementation Technologies, was the project manager for the Ariba e-procurement implementation at ITC Ltd. This was Prakash's first time managing a full-life-cycle e-procurement implementation and he was having problems finding out what was delaying the project. He had been aware of some potentially troublesome events early in the project but had not been comfortable reporting them to his client.*

### Background

Mr Prakash was a successful IT specialist with about twelve years of technical software development experience, and was very confident of the Ariba functionality. He was looking forward to a promotion when this project was over. His client Mr Suresh, CFO, ITC was demanding answers and Prakash had to find out what was going wrong. The Ariba implementation was composed of several phases, however, the critical path went through two major components of the project: technical infrastructure setup and software customization. Looking at the project plan alone, Prakash could not find out which component was causing the delay.

The objective of installing the Ariba e-procurement platform, was to streamline the procurement process, and expedite user adoption, by moving all the suppliers onto the platform. In addition, many other benefits from implementing the Ariba solution, were that it would encourage compliance with negotiated agreements, increase the purchasing power of ITC and reduce processing costs and cycle times. In addition, it would track purchasing behavior and retrieve historical information for decision making.

**Ariba Project**

E-procurement is the purchasing of commodities and services via the Internet. It involves the use of an electronic catalog of items, automated purchase requisitioning, followed by an automated approval process. The Ariba project on e-procurement linked suppliers on a common platform, that enabled ITC to connect seamlessly to suppliers for all their purchase requirements — from analysis and planning to fulfillment and payment.

**Proposed Approach and Plan**

The partnership between ITC and Implementation Technologies was designed to leverage purchase process, IT and experience implementing the Ariba solution. A phased approach was taken to ensure project delivery by October 1, 2023. This approach would ensure effective use of resources and enable transfer of knowledge to ITC in order to complete the full implementation of the project.

The original project timeline was as follows: (Chart in **Exhibit 1)**

| | |
|---|---|
| Project start date: | May 1, 2023 |
| Pilot: | June 25, 2023 |
| Live date: | October 1, 2023 |

The pilot project had gone as planned, but by September 1, it was clear the project was not going to go live on October 1.

**Project Management**

The project management team needed to focus on project issues, while continuously identifying and managing risks. Further it had to ensure that complete knowledge transfer takes place between consulting team and client, It had to provide a basis for an end-user help desk, and achieve complete client satisfaction.

**Project Plan**

Implementation Technologies designed the plan to roll out Ariba to 250 users in ITC. A gap analysis was conducted prior to the start of the project that compared Ariba functionality with the “to be” process and identified the differences for review. This analysis enabled Implementation Technologies to understand the gaps between ITC’s current procurement system and an ideal e-procurement solution.

The project team documented the detailed steps necessary to implement the appropriate change initiatives and effectively roll out Ariba. The first project phase resulted in a pilot test in which Mr Suresh was able to see and test Ariba functionality for the first time. He and other senior officers were very enthusiastic about the successful pilot test.

**Project Objectives**

One of the objectives was to design and configure the initial Ariba solution that would serve as both a "proof of concept" and learning tool to aid in the establishment of an State-wide e-procurement solution. The ultimate goal was to roll out the Ariba application across the State for approximately 250 officers, on October 1. The pilot project was an integral component of the project as a first test of the solution. The project would also provide GoT with a low-risk and controlled experience into leveraging Ariba e-procurement technology and to train officers in developing functional and technical expertise in using the Ariba application.

**Project Organization**

**Exhibit 2** gives the resources and roles required from GoT and Implementation Technologies to successfully staff the project. It estimated a six-month time period to successfully deliver the customized Ariba project. GoT provided eight officers to staff the project. Some of them assisted on an as needed basis. A project manager from GoT, worked with Prakash, to help manage issues for the project team. Most of the individuals provided by GoT were experienced procurement officers who were responsible for working with the Implementation Technologies team to ensure Ariba worked as intended. Implementation Technologies provided seven individuals to staff the project. A project quality advisor was employed part-time to provide quality management guidance throughout the project. Prakash was responsible for overall project management and leadership.

**Project Scope**

From the following high-level scope activities, project tasks were developed to support the delivery and execution of the final Ariba e-procurement application.

1. *Ariba Version 7.0 Configuration/Installation.* Install and configure server hardware, install third party software. Install four initial packages of Ariba 7.0 (demo, test, pilot, and development).
2. *Process Design/Redesign.* Validate “as is” and develop “to be” purchase requisition-to-check sourcing processes. Identify functional requirements not addressed by Ariba. Document end-to-end receiving requirements and commodity code mapping.
3. *Integration of Ariba 7.0 - Implement* needed push-and-pull adapters.
4. *Catalog Content On-Boarding.* Implement four supplier catalogs, configure catalog hierarchy to support catalogs implemented, and adapt UN/Standard Products and Services Code (UNSPSC).
5. *Supplier Enablement.* Work with suppliers. Plan and coordinate the supplier conference.
6. *Purchase Procedures* - Implement approval rules as stated in the request for proposal.
7. *Source Data and Adapters.* Manually load control data (e.g., unit of measure (UOM), currency, user hierarchy, vendor information, purchase transactions).
8. *Change Management.* Includes end-user communication planning, development and execution of training curriculum for pilot end-user roll-out, assistance with developing training materials.
9. *Reports.* Use standard reporting functionality and begin capturing requirements for custom reports.
10. *Custom Functionality.* Capture custom requirements in a functional gap analysis and research offline with Ariba to identify potential solution approaches for future implementation.

***System Testing***

System testing plans were developed to validate that the system architecture and software associated with Ariba met GoT’s requirements. The system had to meet

or exceed the performance, reliability, maintainability, and availability expectations of GoT.

### *Technical Infrastructure*

Frequent Ariba server reboots were required during installation, so no other access to these servers could be active during the installation process. Consultants needed full access to the Ariba servers during installation. Full administrative rights were given to the consultants during the installation process and were ongoing for development and test environments.

System administrators were available for on-call support during the installation of all instances. All necessary hardware and software for the Ariba e-procurement solution were installed prior to the project kickoff, and the workspace was prepared and designated for the team.

### *Data Cleansing*

For the completed project, Information Technologies required GoT to cleanse all source data required to support the Ariba system. In addition, the generation of all associated data conversion files had to be completed by GoT. So far in the project, GoT had lived up to the contract and had delivered on schedule.

### Critical Success Factors

Critical success factors for this project included a plan for establishment of clearly defined project objectives, understanding GoT's requirements, understanding current supplier database and identifying and assigning key resources. It was critical for the project management team to build early consensus across the user base and establish points of escalation and indicators to keep the team on track and working together.

### Project Status to Date

The project implementation had been running rather smoothly to date, but some events had impacted it. For instance, very early in the project, a part-time ITC staff had been repeatedly pulled off the project for other duties. At the end of June,

immediately after the successful pilot test, the server equipment was delivered late. In July, system testing of the development of legacy data interfaces was scheduled late. In this testing, the project team uncovered several things that were not working as designed. These events all contributed to delaying unit testing and holding up the Ariba project. The data Prakash's staff provided is given in **Exhibit 2–Exhibit 4**, and **Exhibit 5** is the standard Implementation Technologies earned value analysis template.

### Exhibit 1: Project Timeline

This chart outlines the project timeline for the Ariba implementation. The project began in May and the go-live date was October 1, 2023. The Pilot was scheduled for June 25. This was the first time that the Ariba e-procurement system, customized for GoT, was functionally demonstrated.

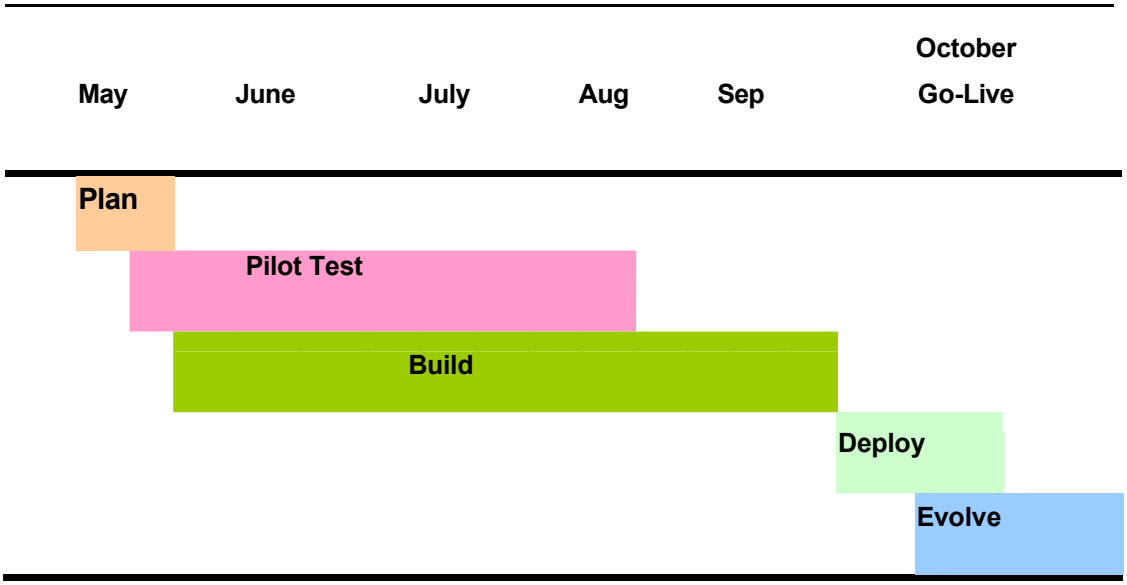

**Exhibit 2:** Infrastructure and Software Customization Budgeted Cost of Work Scheduled

## TECHNICAL INFRASTRUCTURE PLAN

The amounts given below represent the budgeted cost of work scheduled (BCWS) to be done for the given time period for the technical infrastructure component of the project plan.

| Month | Amount (Rs) |
|---|---|
| May | 120,000 |
| June | 192,000 |
| July | 192,000 |
| August | 192,000 |
| September | 192,000 |
| October | 60,000 |

## SOFTWARE CUSTOMIZATION PLAN

The amounts below represent the budgeted cost of work scheduled (BCWS) to be done for the given time period for the software customization component of the project plan.

| Month | Amount |
|---|---|
| May | 120,000 |
| June | 192,000 |
| July | 192,000 |
| August | 192,000 |
| September | 192,000 |
| October | 60,000 |

**Exhibit 3:** Infrastructure and Software Customization Actual Cost

## TECHNICAL INFRASTRUCTURE ACTUAL COST

The amounts below represent the actual cost of work performed (ACWP) for the given time period for the technical infrastructure component of the project plan.

| Month | Amount |
|---|---|
| May | 120,000 |
| June | 215,000 |
| July | 192,000 |
| August | 216,500 |
| September | 170,000 |

## SOFTWARE CUSTOMIZATION ACTUAL COST

The amounts below represent the actual cost of work performed (ACWP) for the given time period for the software customization component of the project plan.

| Month | Amount |
|---|---|
| May | 119,000 |
| June | 187,000 |
| July | 165,000 |
| August | 189,000 |
| September | 186,000 |

**Exhibit 4:** Infrastructure and Software Customization Actual Performance

## TECHNICAL INFRASTRUCTURE ACTUAL PERFORMANCE

The amounts below represent the budgeted cost of work performed (BCWP) in the given time period for the technical infrastructure component of the project plan.

| Month | Amount |
|---|---|
| May | 120,000 |
| June | 170,000 |
| July | 173,000 |
| August | 190,000 |
| September | 185,000 |

## SOFTWARE CUSTOMIZATION ACTUAL PERFORMANCE

The amounts below represent the budgeted cost of work performed (BCWP) in the given time period for the software customization component of the project plan.

| Month | Amount |
|---|---|
| May | 133,250 |
| June | 197,000 |
| July | 220,000 |
| August | 215,000 |
| September | 240,000 |

**Exhibit 5:** Earned Value Analysis Template

| Software Customization | Monthly Plan | | May | Jun | Jul | Aug | Sep | Oct |
|---|---|---|---|---|---|---|---|---|
| Monthly status | Plan | BCWS | | | | | | |
| | Actual | ACWP | | | | | | |
| | Actual | BCWP | | | | | | |
| Rolling status | Plan | BCWS | | | | | | |
| | Actual | ACWP | | | | | | |
| | Actual | BCWP | | | | | | |
| Rolling ratios | Schedule impact | SV = BCWP – BCWS<br>SPI = BCWP / BCWS | | | | | | |
| | Cost impact | CV = BCWP – ACWP<br>CPI = BCWP / ACWP | | | | | | |
| | Control | CR = SPI × CPI | | | | | | |
| Technical Infrastructure | | | May | Jun | Jul | Aug | Sep | Oct |
| Monthly status | Plan | BCWS | | | | | | |
| | Actual | ACWP | | | | | | |
| | Actual | BCWP | | | | | | |
| Rolling status | Plan | BCWS | | | | | | |
| | Actual | ACWP | | | | | | |
| | Actual | BCWP | | | | | | |
| Rolling ratios | Schedule impact | SV = BCWP – BCWS<br>SPI = BCWP / BCWS | | | | | | |
| | Cost impact | CV = BCWP – ACWP<br>CPI = BCWP / ACWP | | | | | | |
| | Control ratio | CR = SPI × CPI | | | | | | |

| Combined Projects | | | May | Jun | Jul | Aug | Sep | Oct |
|---|---|---|---|---|---|---|---|---|
| Monthly status | Plan | BCWS | | | | | | |
| | Actual | ACWP | | | | | | |
| | Actual | BCWP | | | | | | |
| Rolling status | Plan | BCWS | | | | | | |
| | Actual | ACWP | | | | | | |
| | Actual | BCWP | | | | | | |
| Rolling ratios | Schedule impact | SV = BCWP – BCWS<br>SPI = BCWP / BCWS | | | | | | |
| | Cost impact | CV = BCWP – ACWP<br>CPI = BCWP / ACWP | | | | | | |
| | Control ratio | CR = SPI × CPI | | | | | | |