

Capitalization of Internally Developed Software

Background

The purpose of this Learn Once, Globally is to provide additional guidance on the accounting treatment for costs incurred when developing software internally. This guidance is meant to serve as a reminder of the guidance provided in the Brink’s Fixed Asset policy (Policy 2012-05) that provides guidance around the different stages of software development and which costs can be capitalized.

Certain IT costs are required to be capitalized:

1. Hardware costs – servers, etc. (see *Fixed Asset Policy*)
2. Software licensed from third parties (see “*Software Licenses*” *Learn Once, Globally*)
3. A portion of payroll and other internal cost incurred to develop software

This case study addresses **the third bullet**.

Guidance

During what stage of the software development can costs be capitalized?

There are three stages when developing software. Certain costs (as explained below) may be capitalized after the project is officially in the Application Development Stage but not before.

Project Stage	Description	Accounting Treatment
Preliminary Project Stage	Planning procedures, including <ol style="list-style-type: none"> 1. Allocation of resources 2. Identification of performance requirements 3. Evaluation of alternatives 4. Consultations with vendors, etc. 	Expense
Application Development Stage	<ol style="list-style-type: none"> 1. Actual design 2. Technological feasibility assessment 3. Coding 4. Installation of hardware 5. Testing of the application 	Capitalize *
Post-implementation/ Operation Stage	<ol style="list-style-type: none"> 1. Training and maintenance costs 2. Data conversion costs 	Expense

*Capitalization of costs in the Application Development stage should begin after both of the following have occurred:

- (1) Preliminary Project Stage is complete and
- (2) Management, with the relevant authority, implicitly or explicitly authorizes and commits to funding a computer software project and it is probable that the project will be completed and the software will be used to perform the function intended

Costs incurred prior to this date should not be capitalized even if some of the costs incurred prior to the date relate to the design, technological feasibility assessment, or other activities normally considered part of the Application Development Stage.



Typically, the two steps above will not be completed simultaneously. For example, execution of the Capital Expenditure Request (CER) would meet the second criteria (management approval); however, there could be additional activities to be performed before the Preliminary Project Stage is considered complete. See the attached Software Project Life Cycle example. In this example, the CER is completed at the end of the discovery phase; however, the planning and requirements phases are completed after the CER, of which both are considered part of the Preliminary Project Stage. As such, in this example, the Preliminary Project Stage would be considered completed once the stage gate review for the requirement phase is completed so that the design phase can begin.

Capitalization in the Application Development Stage shall cease no later than the point at which a computer software project is substantially complete and ready for its intended use, that is, after all substantial testing is completed and the software/application has been deployed into production. In the event of a pilot and not a full roll-out, this is normally once the pilot phase is complete and implementation begins.

What types of costs are capitalized?

Capitalization of costs during the Application Development Stage should include:

1. Payroll and payroll-related benefits (including travel expenses) for internal employees directly involved with the development of the software. Usually this means that only payroll costs for employees in the IT department are allowed to be capitalized. However, other personnel can be included if their time is spent on development stage activities.
2. Materials and services

What types of costs should not be capitalized?

1. Training costs should always be expensed, including during the Application Development Stage.
2. Maintenance costs should always be expensed. A prepaid asset (not a fixed asset) should be used to allocate costs paid to vendors that cover more than a single month if amounts are significant.
3. Overhead and indirect costs should always be expensed. This includes the cost related to project management activities.
4. A portion of the entity's interest costs may be capitalized but these costs are usually not material. Please contact Corporate Accounting if you believe these costs are significant enough to capitalize.

How should you determine the amount of payroll costs to capitalize?

Hours spent. The preferred method of determining the amount of payroll costs to capitalize is to use a project management system to track the hours spent by the types of activities. If you do not have a system to track the amount of time and activities spent on the project, you will need to estimate the amount of time spent by employee in the various activities.

Estimating the time spent on a project is more difficult for manager-level positions and above.

- For example, estimating the amount of time for a non-manager who is coding the application is straightforward and should be capitalized.
- Management activities, such as the direct review of coding, resolving computer design issues, and direct monitoring of the software testing are consistent with the characteristics of the application development stage and should be capitalized.



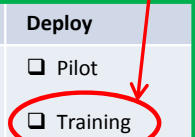
- A project manager or other managers may perform duties such as project organization, risk management, planning, monitoring, budgeting, communicating, and staffing. Project management activities are overhead costs and should be expensed.

Rates per hour. Labor and benefit rates per hour may be specifically identified by employee or averages may be used. Larger projects should use more precise estimates. The calculation of the estimated rates per hour should be documented and retained to support the capitalized software accounting adjustments.

Software Project Life Cycle

Initiate		Execution						Close
Initiate	Discovery	Planning	Requirements	Design	Build	Testing	Deploy	Close
<input type="checkbox"/> PM Requested <input type="checkbox"/> Request Vetted by Governance <input type="checkbox"/> Directors Review & Assign PM	<input type="checkbox"/> Charter <ul style="list-style-type: none"> o Impact Assessment o Resources Identified o Business Case (collaboration between PM & Project Requester) <input type="checkbox"/> ESC: Go/No-Go <input type="checkbox"/> Decision <input type="checkbox"/> CER/AAN (approved projects)	<input type="checkbox"/> Communication Plan <input type="checkbox"/> Issues Log <input type="checkbox"/> Risk Mitigation Plan (includes Risk Register) <input type="checkbox"/> Change Mgmt Log <input type="checkbox"/> Schedule <input type="checkbox"/> Kick-off Mtg	<input type="checkbox"/> Business Requirements (BRD) <ul style="list-style-type: none"> o Use cases o Functional o GAP Analysis o Technical Requirements <input type="checkbox"/> Capture Approval of BRD	<input type="checkbox"/> Technical Design (Direct output from BRD) <input type="checkbox"/> Architecture Review <input type="checkbox"/> Application boarding, if applicable <input type="checkbox"/> Test Plan <input type="checkbox"/> IT Security Review, if applicable <input type="checkbox"/> Implementation Plan (includes Training Plan) <input type="checkbox"/> Maintenance Plan	<input type="checkbox"/> Solution Execution (includes code, software, etc. development) <input type="checkbox"/> Unit Testing <input type="checkbox"/> Build applicable environment <input type="checkbox"/> Pilot Planning, if applicable	<input type="checkbox"/> QA Testing (system, integration, regression & performance and <u>must have QA release signed</u>) <input type="checkbox"/> UAT Testing (may include customer UAT and <u>must have UAT release signed</u>)	<input type="checkbox"/> Pilot <input type="checkbox"/> Training <input type="checkbox"/> Warranty Period <input type="checkbox"/> Customer Acceptance <input type="checkbox"/> Full Rollout	<input type="checkbox"/> Lessons Learned <input type="checkbox"/> Project Closure <input type="checkbox"/> Archive Artifacts
	<input type="checkbox"/> Stage Gate Review	<input type="checkbox"/> Stage Gate Review	<input type="checkbox"/> Stage Gate Review	<input type="checkbox"/> Stage Gate Review	<input type="checkbox"/> Stage Gate Review	<input type="checkbox"/> Stage Gate Review	<input type="checkbox"/> Stage Gate Review	<input type="checkbox"/> Stage Gate Review

Always Expensed



Criteria 2: Management Approval

Criteria 1: Preliminary Project Stage is Complete

Application Development Stage

Post-Implementation Stage Begins

Note: Activities enclosed within the green box indicate the Application Development Stage. In this stage, capitalization may occur for those costs that are allowed to be capitalized per policy.