



Appendix B - Capitalization versus Expense Examples for Internally-Developed Software

Table 1

Business Process Reengineering and Information Technology Transformation		
Steps	Expense	Capitalize
Preparation of request for proposal (RFP)	X	
Current state assessment (Documentation of the company's current business process, except as it relates to the current software structure. This activity is sometimes called mapping, developing an "as-is" baseline, flowcharting or determining the current business process structure.)	X	
Process reengineering (The effort to reengineer the company's business process to increase efficiency and effectiveness, sometimes called analysis, determining "best-in-class," profit/performance improvement development and developing "should-be" processes.)	X	
Restructuring the work force (The effort to determine what employee makeup is necessary to operate the reengineered business processes.)	X	

Table 2

Preliminary Project Stage 1 Activities		
Steps	Expense	Capitalize
Specification of alternatives	X	
Evaluation of alternatives	X	
Determining performance and system requirements	X	
Determination of existence of needed technology	X	
Final selection of alternatives	X	
Cost examples	Expense	Capitalize
Training costs for stage one	X	
Interest costs incurred during stage one	X	
Fees paid to third parties for costs incurred during stage one	X	
Travel expenses incurred by employees during stage one	X	
Payroll and payroll-related costs for stage one	X	
Cost-benefit analysis	X	
General and administrative costs or overhead costs (for example, project management salaries, space rental costs and depreciation of equipment) for stage one	X	



Table 3

Application Development Stage 2 Activities		
Steps	Expense	Capitalize
Design of chosen option, including software configuration and interface		X
Software coding		X
Installation		X
Testing		X
Data conversion costs: type a) Costs incurred to develop or obtain software that allows for access or conversion of old data by a new system		X
Data conversion costs: type b) Costs related to actual data conversion from old to new systems	X	
Cost examples	Expense	Capitalize
Training costs for stage two*	X	
Fees paid to third parties for services provided to develop the software		X
Travel expenses incurred by employees in their duties directly associated with developing software		X
Travel expenses incurred by employees for conferences and training*	X	
Salary and wages and benefit costs outside of a Harvard service center (for example, costs of employee benefits), not including time spent in training or working on data conversion (type b), during stage two	X For sponsored funds	X For non-sponsored funds
Salary and wages and payroll-related costs for training* or data conversion (type b), during stage two	X	
Interest costs incurred during stage two		X
General and administrative costs or overhead costs (for example, project management salaries, space rental costs and depreciation of equipment)* for stage two	X	

*Note: Training (including training-related travel expenses) as well as general and administrative costs must always be expensed, regardless of the software development stage in which they are incurred.

Table 4

Post-Implementation / Operational Stage 3 Activities		
Steps	Expense	Capitalize
Application maintenance	X	
On-going support	X	
Upgrades ≥\$5,000 that contribute additional functionality (increased efficiency is not considered additional functionality)		X
Upgrades that do not contribute additional functionality	X	
Cost examples	Expense	Capitalize
Training costs for stage three	X	
Interest costs incurred during stage three	X	
Fees paid to third parties for costs incurred during stage three	X	
Travel expenses incurred by employees during stage three	X	
Payroll and payroll-related costs for stage three	X	
General and administrative costs or overhead cost (for example, project management salaries, space rental costs and depreciation of equipment) for stage three	X	