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)	Х			
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.)	Х			
Restructuring the work force (The effort to determine what employee makeup is necessary to operate the reengineered business processes.)	Х			

Table 2

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

Table 3

Application Development Stage 2 Activities		
Steps	Expense	Capitalize
Design of chosen option, including software configuration and interface		Х
Software coding		Х
Installation		Х
Testing		Х
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		Х
Data conversion costs: type b) Costs related to actual data conversion from old to new systems	Х	
Cost examples	Expense	Capitalize
Training costs for stage two*	Х	
Fees paid to third parties for services provided to develop the software		Х
Travel expenses incurred by employees in their duties directly associated with developing software		Х
Travel expenses incurred by employees for conferences and training*	Х	
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 fund
Salary and wages and payroll-related costs for training* or data conversion (type b), during stage two	Х	
Interest costs incurred during stage two		Х
General and administrative costs or overhead costs (for example, project management salaries, space rental costs and depreciation of equipment)* for stage two	Х	

^{*}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	Х		
On-going support	Х		
Upgrades ≥\$5,000 that contribute additional functionality (increased efficiency is not considered additional functionality)		Х	
Upgrades that do not contribute additional functionality	Х		
Cost examples	Expense	Capitalize	
Training costs for stage three	Х		
Interest costs incurred during stage three	Х		
Fees paid to third parties for costs incurred during stage three	Х		
Travel expenses incurred by employees during stage three	Х		
Payroll and payroll-related costs for stage three	Х		
General and administrative costs or overhead costs (for example, project management salaries, space rental costs and depreciation of equipment) for stage three	х		

^{**}Note: See Appendix A. II.B. - Payroll and payroll-related costs for employees allowable on sponsored funds where sponsor terms and conditions require that funds be used exclusively on capitalized projects.