

OBJECTIVES

After reading this chapter, you will be able to:

- 1 Explain the accounting alternatives for intangibles.
- 2 Understand the amortization or impairment of intangibles.
- 3 Identify research and development costs.
- 4 Explain the conceptual issues for research and development costs.
- 5 Account for identifiable intangible assets including patents, copyrights, franchises, computer software costs, and trademarks and tradenames.
- 6 Account for unidentifiable intangibles including internally developed and purchased goodwill.
- 7 Understand the disclosure of intangibles.
- 8 Explain the conceptual issues regarding intangibles.

Intangibles

Managing Intangibles Can Lead to Large Profits

With the move to a more knowledge-based economy over the last three decades, intangible assets are replacing tangible assets as the key value driver for the economy. A recent study by Accenture estimates that, on average, 60% of a company's value is tied to intangible assets. Of the executives surveyed, 49% indicated that their company primarily relies on intangible assets to create shareholder wealth; however, only 5% of executives indicated that their company had an effective system for measuring the performance of intangible assets.

Given the high degree of uncertainty in valuing the future benefits from intangibles, it is easy to see why management may often become frustrated with tracking intangible assets. Consider the recent events affecting **Merck & Co.** In September 2004, Merck withdrew its arthritis medicine, Vioxx, from the market because of a link between the medicine and increased risk of heart problems. As a result, its stock plunged more than 26%. In January 2005, Merck's stock fell 10% after a federal appeals court effectively nullified a patent and granted a competitor the right to market a version of Merck's second-biggest selling drug. Finally, Merck will soon lose patent protection on its top-selling product, the cholesterol-lowering drug Zocor.

Credit: Associated Press, AP



While companies like Merck may have experienced negative financial effects related to intangible assets, other companies have effectively defended the value of their intangible assets. For example, **Intergraph Corp.** reported that it has received approximately \$860 million in 2003 and 2004 relating to the protection and enforcement of its intellectual property. Trying to measure, track, and analyze intangible assets is a difficult task. However, if companies can effectively manage their intangibles, they should be able to enhance company performance and increase shareholder value.

FOR FURTHER INVESTIGATION

For a discussion of intangible assets, consult the Business & Company Resource Center (BCRC):

- Developing an Effective Strategy for Managing Intellectual Assets. John Tao, Joseph Daniele, Edward Hummel, David Goldheim, Gene Slowinski, *Research-Technology Management*, 0895-6308, Jan–Feb 2005, v48, i1, p50–58.
- The High Price of Popularity. David Kelly, Monica Riva Talley, *Managing Intellectual Property*, 0960-5002, Feb. 2004, i136 p57–61.

As we discussed in Chapter 10, tangible noncurrent assets have a physical substance that can be seen and touched. In contrast, **intangible assets, which generally result from legal or contractual rights, do not have a physical substance.** Intangible and tangible noncurrent assets do have characteristics in common, as both (1) are held for use and not for investment (although they are “used” in very different ways), (2) have an expected life of more than one year, (3) derive their value from their ability to generate revenue for their owners, and (4) are expensed by a company in the periods in which it receives their benefits, if the assets have finite lives.

Intangible assets have four additional characteristics that distinguish them from tangible assets:

1. There is generally a higher degree of uncertainty regarding the future benefits that may be derived.
2. Their value is subject to wider fluctuations because it may depend, to a considerable extent, on competitive conditions.
3. They may have value only to a particular company.
4. Goodwill and intangible assets with indefinite lives are not expensed.

Accounting terminology includes only noncurrent assets in intangible assets. However, legal terminology includes as intangibles all assets without physical substance and therefore includes such current assets as accounts and notes receivable, and investments in securities. Accounting practice restricts the use of the term *intangible* to such items as patents, licenses, copyrights, franchises, computer software costs, trademarks and trade-names, and goodwill. We discuss each of these items later in the chapter.

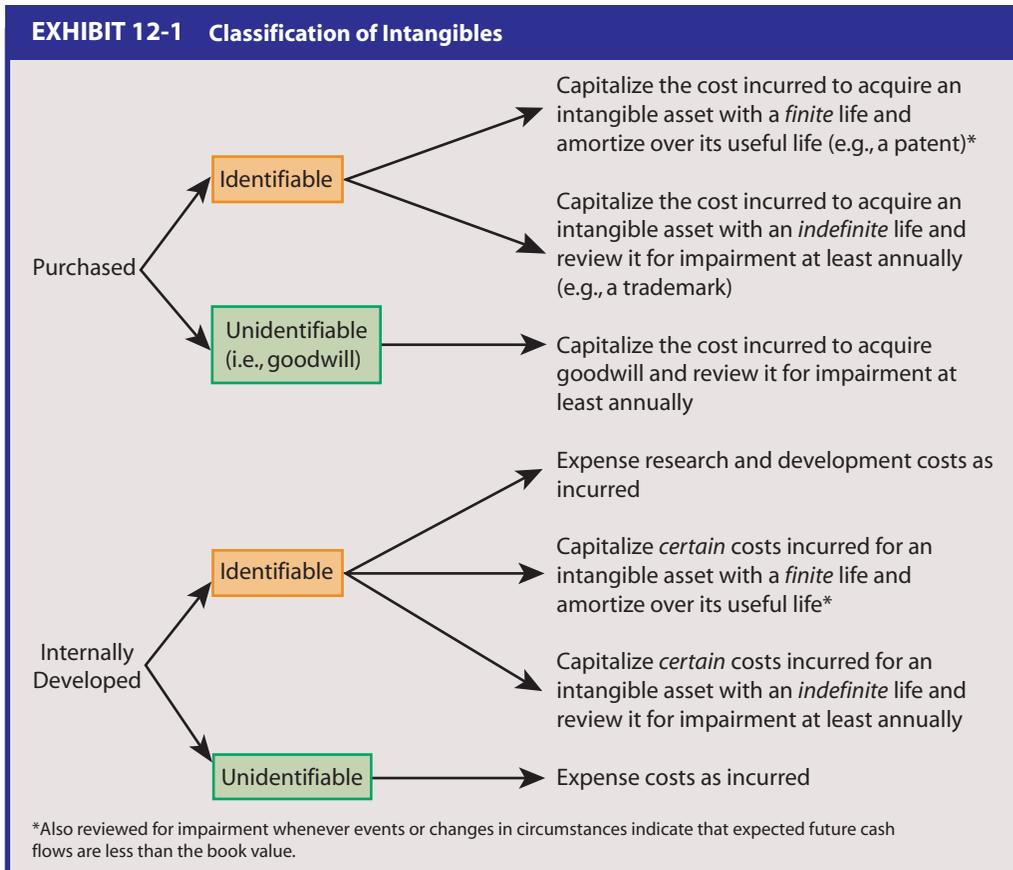
ACCOUNTING FOR INTANGIBLES

1 Explain the accounting alternatives for intangibles.

Accounting for intangible assets follows some of the general principles used for tangible assets. They are both initially recorded at cost. As we discuss later, some intangibles are amortized and others are not amortized, but instead are reviewed for impairment. Those that are amortized are reported on a company’s balance sheet at their book value, which is the cost less the accumulated amortization. The accumulated amortization results from a periodic allocation of the cost as amortization expense on the company’s income statement. As we discussed in Chapter 11, amortization follows the same principle as depreciation, but is the term used specifically for intangible assets. We discuss the specific issues related to whether or not a company amortizes an intangible asset and the measurement of any amortization expense on its income statement in the following sections. The other accounting principles that we discussed in the previous two chapters also apply to intangible assets. Thus, the principles used for determining the acquisition cost, capital and operating expenditures, impairment, and disposal apply to both tangible and intangible assets. However, the measurement of any impairment may be different, as we discuss later.

Cost of Intangibles

Intangibles may be classified by a company according to whether they are *purchased* from others (externally acquired) or *internally developed*. In addition they may be classified according to whether they are *identifiable* or *unidentifiable*. **Identifiable intangible assets** include items such as patents, franchises, and trademarks, whereas the primary **unidentifiable intangible asset** is goodwill. These classifications lead to the four alternatives, and the proper method of accounting for each, which we show in Exhibit 12-1.



Accounting for the cost of intangibles is discussed in **FASB Statement No. 142** as follows:¹

1. **Purchased Identifiable Intangibles.** A company may purchase an intangible asset, such as a patent, from another company. The acquisition of a purchased intangible involves no special issues. It is accounted for in the same way as we discussed in Chapter 10 for the acquisition of a single asset, in a group of assets, or in an exchange of assets.
2. **Purchased Unidentifiable Intangibles.** A company capitalizes the cost of a purchased unidentifiable intangible asset. Goodwill is the major unidentifiable intangible. Goodwill can be acquired only through the purchase of another company or segment of a company. We discuss the nature of and accounting for goodwill in more detail later in this chapter.
3. **Internally Developed Identifiable Intangibles.** When a company internally develops an intangible asset, such as a patent, it can capitalize only certain costs. The costs of a patent include the legal and related costs of establishing the rights associated with a patent but *not* the costs of developing the product or process that is being patented. A company includes those latter costs in research and development costs and must expense them as incurred according to **FASB Statement No. 2**. Thus, the

1. "Goodwill and Other Intangible Assets," *FASB Statement of Financial Accounting Standards No. 142* (Norwalk, Conn.: FASB, 2001).

expensing of research and development costs is an exception to the general rule of capitalization of internally developed identifiable intangibles. (We discuss this topic later in the chapter.)

4. *Internally Developed Unidentifiable Intangibles.* A company expenses the costs of internally developed unidentifiable intangibles as incurred, even though they may be expected to have benefits extending beyond the current period. Examples of these costs include employee training and design of quality products. This procedure is justified because either the costs incurred or the expected life of the benefits is difficult to measure reliably. We discuss these measurement issues more fully in the section on research and development costs in this chapter.

Amortization or Impairment of Intangible Assets

2 Understand the amortization or impairment of intangibles.

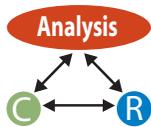
Intangible assets are separated into three categories to determine whether or not they are amortized, and how they are reviewed for impairment. The three categories are:

1. intangible assets with a finite (limited) life,
2. intangible assets with an indefinite life, and
3. goodwill.

We will discuss the general accounting issues for the first two categories of identifiable assets in the next sections. We will discuss goodwill as part of the unidentifiable intangibles section later in the chapter.

Intangible Assets With a Finite Life Are Amortized

An identifiable intangible asset that has a finite life (such as a patent) is *amortized over its useful life*. That is, the useful life is the period over which the asset is expected to contribute directly or indirectly to the future cash flows of the company. Factors that a company should consider in estimating the useful life of an intangible asset include: (1) the expected life of the asset; (2) the expected useful life of another asset that is related to the life of the intangible asset, such as the mineral rights that relate to a depleting asset; (3) any legal or contractual provisions that enable renewal or extension of the asset's legal or contractual life without substantial economic cost; (4) the effects of obsolescence, demand, competition, and other economic factors; and (5) the level of maintenance costs required to obtain the expected future cash flows from the asset.²



The calculation of the amortization of intangible assets follows the same principles as the depreciation of tangible assets. The amount of an intangible asset to be amortized is the cost less the residual value, if any. As with depreciation, a company selects the amortization method based on the expected pattern of benefits the intangible asset will produce. If the company cannot reliably determine the pattern, then it must use the straight-line method. As for tangible assets, the amortization (debit entry) may be either a production cost and included in Work in Process (such as a patent on a manufacturing process) or an operating expense (such as a copyright). The credit entry is made to a contra account, Accumulated Amortization: Intangibles.

Example: Amortization Suppose that Schultz Company purchases a patent for \$85,000 and amortizes it using the straight-line method over 10 years (the estimated economic life) with no expected residual value. The journal entries to record the acquisition and the amortization for the first year are as follows:

Patent	85,000	
Cash		85,000
Amortization Expense (or Factory Overhead)	8,500	
Accumulated Amortization: Patent		8,500

2. *Ibid.*, par. 11.

The company reports the \$76,500 book value (\$85,000 cost – \$8,500 accumulated amortization) of the patent in the intangible assets section of its balance sheet.

FASB Statement No. 142 requires a company to evaluate the estimated economic life every year to determine whether a revised estimate is warranted.³ Such a change in estimate is accounted for by computing a new periodic amortization amount based on the current book value and the new estimated remaining economic life, as we discussed in Chapter 11.

If an intangible asset is impaired because its expected future net cash flows are less than its book value, a company must write down the asset to its fair value using the procedures of *FASB Statement No. 144*, as we discussed in Chapter 11. ♦



Intangible Assets With an Indefinite Life Are Reviewed for Impairment

Some identifiable intangible assets, such as trademarks and tradenames, have a potentially indefinite life. An intangible asset with an indefinite life is *not* amortized (until its life is no longer considered to be indefinite), but is *reviewed for impairment*.⁴ A company must review these intangible assets for impairment annually, or more frequently when events or circumstances occur that indicate the intangible may be impaired.

A company tests an intangible asset for impairment by first estimating the fair value of the asset. The fair value of an intangible asset is the amount at which the asset could be bought or sold in a current transaction between willing parties. The quoted market price in an active market is the best measure of fair value. However, because a quoted market price is often unavailable for an intangible asset, a company may estimate the value by using the value of similar assets, or by using present value techniques.

An intangible asset is impaired when its fair value is less than its carrying value. The impairment loss is the amount by which the fair value of the intangible asset is less than its carrying value (i.e., the original cost, unless the asset was impaired in a previous period). The loss is recorded by debiting an impairment loss account and crediting the intangible asset account.

Example: Impairment Suppose the Norton Company purchased a trademark two years ago for \$60,000. The company considered the trademark to have an indefinite life and it still has a carrying value of \$60,000. At the end of the current year, the company determines that the fair value of the trademark is \$20,000. Norton Company records the \$40,000 loss (\$20,000 fair value – \$60,000 cost) as follows:

<p style="color: #0070C0; margin: 0;">Impairment Loss on Trademark</p> <p style="margin: 0;">Trademark</p>	<p style="color: #0070C0; margin: 0;">40,000</p>	<p style="color: #0070C0; margin: 0;">40,000</p>
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Norton Company reports the loss as a component of income from continuing operations on its income statement. The company reports the \$20,000 fair value of the trademark in the intangible asset section of its balance sheet. Every year the company must compare the fair value with the \$20,000 carrying value to determine if the trademark is again impaired.

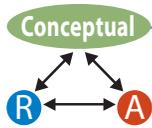
In the remaining sections of this chapter we discuss specific intangibles, starting with research and development costs. Although research and development costs are not capitalized, we discuss them first because of the impact they have on the capitalization of many other intangibles. ♦



3. *Ibid.*, par. 14.

4. *Ibid.*, par. 16. Before *FASB Statement No. 142*, all intangible assets were amortized over their economic lives, not to exceed 40 years (except those acquired before November 1, 1970, and for which there is no evidence of a decline in value or a limited economic life).

RESEARCH AND DEVELOPMENT COSTS



Many companies spend large sums each year on research and development (R&D). *FASB Statement No. 2* requires that a company must expense all its research and development costs as incurred.⁵ Even though R&D costs often benefit future periods, the decision to require expensing in all circumstances was made primarily in the belief that uniformity would enhance *comparability* and would eliminate the possibility of income manipulation. It also avoids the *reliability* problems of how much to capitalize and over what period to amortize the capitalized costs. We evaluate the FASB's decision to require expensing of R&D costs at the end of this section.

Two issues in the expensing of R&D are the activities and costs that a company includes in each category. Research and development activities are defined by the FASB as follows:

3 Identify research and development costs.

- (a) **Research** is the planned search or critical investigation aimed at discovering new knowledge with the hope that the knowledge will be useful in developing a new product or service ("product") or a new process or technique ("process") or in significantly improving an existing product or process.
- (b) **Development** is the translation of research findings into a plan or design for a new product or process or for significantly improving an existing product or process, whether intended for sale or use. It includes the conceptual formulation, design, and testing of product alternatives, construction of prototypes, and operation of pilot plants. It does not include routine or periodic alterations to existing products, production lines, manufacturing processes, and other ongoing operations, even though those alterations may be improvements; it does not include market research or market testing activities.⁶

To help you understand these general definitions, we show examples of activities that are included as R&D and those that are excluded in Exhibit 12-2.

Costs of activities *excluded* from R&D are either expensed or capitalized according to the normal capitalization criteria, as we discussed in Chapter 10. When an activity is included in R&D, a company must identify the costs so that it may record the correct amount of R&D expense. The costs for the following elements of R&D activities are *included* in R&D costs, and thus are expensed as incurred:

1. Materials, equipment, and facilities
2. Personnel
3. Intangibles purchased from others
4. Contract services—the costs of services performed by others in connection with the R&D activities of an enterprise
5. Indirect costs—R&D includes a reasonable allocation of indirect costs; however, general and administrative costs that are not clearly related to R&D activities are not included as R&D costs⁷

The inclusion in R&D expense of the cost of materials, equipment, facilities, and intangibles purchased from others requires further explanation. If the items have **alternative future uses**, then a company follows normal accrual procedures. For example, a company includes the costs of R&D personnel in R&D expense as payments are made and accrued at year-end. It also records the costs of materials in inventory and then includes them as R&D expense when it uses the materials. Also, a company capitalizes the cost of a machine that has alternative future uses (even if only in other R&D projects) and *depreciates* the cost over the asset's estimated useful life. The company includes the depreciation in R&D expense.

5. "Accounting for Research and Development Costs," *FASB Statement of Financial Accounting Standards No. 2* (Stamford, Conn.: FASB, 1974), par. 8.

6. *Ibid.*

7. *Ibid.*, par. 9–10.

EXHIBIT 12-2 Examples of Activities Included in and Excluded from R&D

Included in R&D

- (a) Laboratory research aimed at discovery of new knowledge.
- (b) Searching for applications of new research findings or of other knowledge.
- (c) Conceptual formulation and design of possible product or process alternatives.
- (d) Testing in search for or evaluation of product or process alternatives.
- (e) Modification of the formulation or design of a product or process.
- (f) Design, construction, and testing of preproduction prototypes and models.
- (g) Design of tools, jigs, molds, and dies involving new technology.
- (h) Design, construction, and operation of a pilot plant that is not of a scale economically feasible to the company for commercial production.
- (i) Engineering activity required to advance the design of a product to the point that it meets specific functional and economic requirements and is ready for manufacture.

Excluded from R&D

- (a) Engineering follow-through in an early phase of commercial production.
- (b) Quality control during commercial production, including routine testing of products.
- (c) Troubleshooting in connection with breakdowns during commercial production.
- (d) Routine, ongoing efforts to refine, enrich, or otherwise improve upon the qualities of an existing product.
- (e) Adaptation of an existing capability to a particular requirement or customer's need as part of a continuing commercial activity.
- (f) Seasonal or other periodic design changes to existing products.
- (g) Routine design of tools, jigs, molds, and dies.
- (h) Activity, including design and construction engineering, related to the construction, relocation, rearrangement, or start-up of facilities or equipment other than (1) pilot plants and (2) facilities or equipment whose sole use is for a particular research and development project.
- (i) Legal work in connection with patent applications or litigation, and the sale or licensing of patents.

Source: FASB Statement No. 2, par. 9 and 10.

However, the company includes in R&D expense the costs of any materials, equipment, facilities, and intangibles purchased from others that have **no alternative future uses** in research and development or other activities. For example, if a company can use inventory or a machine only for one R&D project and so has no alternative future uses for it, the company includes the total acquisition costs in R&D expense in the period it incurs the cost.

Example: R&D Costs Assume that the Kent Company incurred the following costs for R&D activities:

Material used from inventory	\$50,000
Wages and salaries	90,000
Allocation of general and administrative costs	20,000
Depreciation on building housing R&D activities	25,000
Machine purchased for R&D project that has no alternative future uses	30,000

The company includes all these costs in R&D expense and records them as follows:

Research and Development Expense	215,000	
Cash, Payables, etc.		140,000
Inventory		50,000
Accumulated Depreciation: Building		25,000

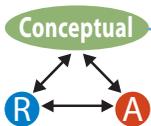
FASB Statement No. 2 does not cover the costs of R&D activities conducted for others (including the government) under a contractual arrangement. A company capitalizes these costs as incurred and expenses them when it recognizes the revenue from the contract. ♦

Conceptual Evaluation of Accounting for Research and Development Costs

The FASB considered four methods for companies to account for R&D costs when *FASB Statement No. 2* was being prepared:

1. Expense all costs when incurred
2. Capitalize all costs when incurred and amortize them over the periods expected to benefit
3. Capitalize costs when incurred if specified conditions are fulfilled and record all other costs as expenses
4. Accumulate all costs in a special category until the existence of future benefits can be determined

4 Explain the conceptual issues for research and development costs.



The first alternative is supported and the second alternative countered by the argument that there is a high degree of uncertainty about the future benefits of a company's individual R&D projects. Most projects do not result in any identifiable future benefits. Therefore, it is desirable to expense all costs in the periods incurred. In addition, it is difficult to show a direct relationship between R&D costs and specific future revenue generated. Therefore, it is not possible to *reliably* estimate the expected life and the pattern of the benefits received, and thereby determine the appropriate amortization. If R&D costs are about the same each period, the amount of the expense each period will be similar, whether the cost was capitalized and then expensed by the straight-line method or simply expensed immediately. However, immediate expensing means that the company does not record an asset on its balance sheet. This omission may lead to a very significant understatement of assets for some companies, if the costs incurred on their R&D projects often will generate future benefits.

The second alternative, capitalizing all costs as incurred, would be supported by the argument that a company undertakes R&D projects only to develop future benefits. Therefore, an asset should be recognized by capitalizing the entire costs of R&D without regard to the certainty of future benefits from individual projects. However, this approach would be inconsistent with other areas of accounting where the cost of each asset is recorded and expensed over its individual life. In addition, capitalization of the entire costs of R&D would make it difficult to develop a meaningful amortization period.

The third alternative, selective capitalization, would have desirable conceptual features. A company would accumulate the costs of each individual project. It would then capitalize and expense the costs over the life of the benefits to be received. If no such benefits were expected, the costs would be expensed immediately. Thus, R&D costs would be capitalized and expensed on the same basis as other costs. However, this alternative would be difficult to implement. What criteria for capitalization would be used? The FASB considered a number of criteria, such as definition of the product or process, technological feasibility, marketability and usefulness, economic feasibility, management action, and distortion of net income comparisons. Any criteria would have been very difficult to define and implement reliably, and would probably have led to a lack of comparability. In addition, it might be several periods after the costs have been incurred before the company could reasonably evaluate the likelihood of benefits being received.

The fourth alternative would be to classify the costs in a special category on the company's balance sheet. The two alternative categories suggested were below the assets or as a reduction of stockholders' equity. This procedure would not be desirable because it would violate the basic concepts underlying the fundamental accounting equation. It was suggested as an alternative to draw attention to the basic uncertainty surrounding the nature of R&D costs, and to delay the decision regarding capitalizing or expensing until sufficient information for a reliable decision would become available.

The FASB's choice basically was between an alternative that has desirable conceptual features but significant implementation difficulties (capitalization), and an alternative that is less desirable conceptually but is much easier to implement and is likely to lead to greater *comparability* between companies (immediate expensing). As in so many situations, the choice was between *relevance* and *reliability*. It is not surprising that the FASB decided on the latter alternative. In addition, income tax regulations allow a company to immediately expense its R&D costs, so a major difference between financial income and taxable income was eliminated.



SECURE YOUR KNOWLEDGE 12-1

- The accounting for intangible assets follows many of the same general principles as the accounting for tangible assets; however, intangible assets have unique characteristics (e.g., uncertainty regarding future benefits, wide fluctuations in value, possibility of indefinite lives) that lead to different accounting treatments.
- Purchased (externally acquired) intangible assets are recorded at their historical cost, while only *certain* costs of internally developed assets may be capitalized.
- Intangible assets with finite lives are amortized over their useful lives. Intangible assets with indefinite lives are not amortized but instead are reviewed for impairment (fair value less than carrying value) at least annually.
- Research and development (R&D) costs, which include expenditures for materials, equipment, facilities, personnel, purchased intangible assets, contract services, and other indirect costs, are required to be expensed as incurred.
- Capitalizing R&D costs has conceptual merit because these costs should lead to future benefits; however, the implementation difficulties with capitalization (it is not possible to reliably estimate the pattern of future benefits) led the FASB to decide on the more reliable, but perhaps less relevant, alternative of expensing R&D costs.

IDENTIFIABLE INTANGIBLE ASSETS

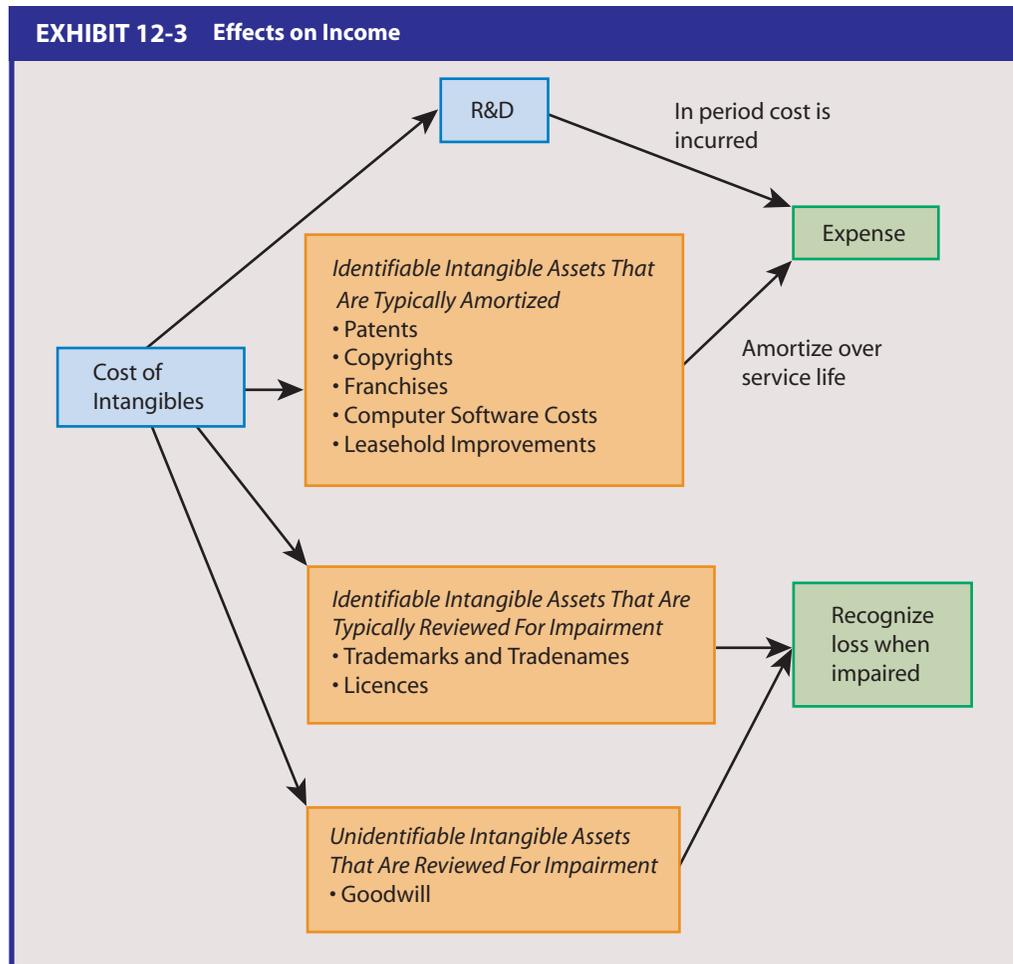
Identifiable intangible assets are those intangibles that can be purchased or sold separately from the other assets of the company. A company capitalizes the costs of identifiable intangibles (except for R&D costs). Because a company expenses R&D and operating costs, it capitalizes only certain costs of *internally developed* identifiable intangibles—not the total costs that might be related to the item. For example, it capitalizes only the direct legal costs of applying for and registering a tradename, and it expenses all indirect costs as incurred, such as advertising to promote the tradename. If a company *purchases* an identifiable intangible asset, it capitalizes the cost on the same basis as for a tangible asset by including all necessary costs. Exhibit 12-3 shows the differences between the amortization and impairment of intangible assets and the expensing of R&D costs in the period incurred. We discuss each of these identifiable intangible assets in the following sections.

Patents

A patent is an exclusive right granted by the federal government giving the owner control of the manufacture, sale, or other use of an invention for 20 years from the date of filing. Patents cannot be renewed, but their effective life may be extended by obtaining new patents on modifications and improvements to the original invention.

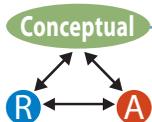
A patent has value if it enables the company to obtain higher income by selling products at a higher price, producing products at a lower cost, or producing a product for which there is less competition. In many situations, the value of a patent is eliminated

5 Account for identifiable intangible assets including patents, copyrights, franchises, computer software costs, and trademarks and tradenames.



before the end of its legal life by the actions of other companies that produce a competing product without violating the patent, or through technological change or a change in demand for the product. Therefore, a patent has a finite life. A company amortizes the cost of a patent over its expected *useful* life if that life is shorter than 20 years.⁸

Licenses often are granted to others to use the invention covered by a patent. A company accounts for amounts received under such agreements under the normal revenue recognition criteria by including them in income when earned and realizable rather than when received. A company should disclose license agreements in the notes to its financial statements if their effect on its income is material.



It may be necessary for the owner of a patent to defend it against infringement by others. A company capitalizes the costs of successfully defending the legal validity of a patent because the benefits of the patent are maintained for its remaining economic life. However, given the length of time it may take to resolve a patent infringement suit, some companies may expense the legal costs when incurred because of the uncertainty about winning the suit. If the company loses the suit, it immediately expenses all legal costs not previously expensed. It also writes off the remaining book value of the patent because there is no remaining economic value. However, if a company expenses the legal costs and then wins the suit, it does *not* make a prior period adjustment.

8. Prior to 1994, the legal life of a patent was 17 years from the date of grant.

Copyrights

A copyright is a grant by the federal government covering the right to publish, sell, or otherwise control literary or artistic products for the life of the author plus 70 years.⁹ Copyrights cover items such as books, music, and films. Accounting for copyrights follows the same principles as those used for patents. A copyright has a finite life. The cost is amortized over the useful life either on a straight-line basis, or on an activity basis if that is a better measure of the pattern of benefits.

It is possible that a fully amortized copyright may develop a significant value, such as in the case of some old films or music. Under current generally accepted accounting principles, which require that assets are recorded at cost, such an increase in value is not recognized in the financial statements.

Franchises

Franchises are agreements entered into by two parties in which, for a fee, one party (the franchisor) gives the other party (the franchisee) rights to perform certain functions or sell certain products or services. In addition the franchisor may agree to provide certain services to the franchisee. Many franchises exist between governments and companies, such as a franchise to provide a monopoly service (e.g., utilities) or to use public property to provide a service (e.g., a ferry). A common example of a franchise between two companies is in the restaurant business, where many units of national chains such as **McDonald's** are locally owned and operated under the terms of a franchise agreement. Another example is the selling of name-brand items in the automotive parts market, such as **Midas Muffler**. A franchisee capitalizes the initial cost it pays to acquire the franchise, whereas it expenses the continuing franchise fees that it pays for services provided by the franchisor in subsequent years according to the normal matching criteria. If a franchise is granted in perpetuity, it would be considered to have an indefinite life and would be tested for impairment at least annually, as we discussed earlier. However, most franchises have a finite legal life that is specified in the franchise agreement. For these franchises, the franchisee amortizes the related initial franchise cost over its useful life. We discuss accounting for franchises by the franchisor in Chapter 18.

Computer Software Costs

FASB Statement No. 86 specifies the accounting for the costs of computer software to be sold or leased. There are three categories of costs associated with software that is to be sold, leased, or otherwise marketed directly or indirectly as part of a product, process, or service.¹⁰ The first category of costs relates to the development stage. **Software production costs** are the costs of designing, coding, testing, and preparing documentation and training



Credit: ©Getty Images/PhotoDisc

9. Prior to 1999, the legal life of a copyright was the life of the author plus 50 years.

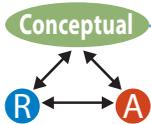
10. "Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed," *FASB Statement of Financial Accounting Standards No. 86* (Stamford, Conn.: FASB, 1985). For additional discussion, see N. Erikson and D. Herskovits, "Accounting for Software Costs: Cracking the Code," *Journal of Accountancy*, November 1985, pp. 81–96.

materials. A company includes these costs in research and development expense until technological feasibility of the product is established. Because companies use different development methods, **technological feasibility is established either on the date the company completes a detailed program design or, in its absence, when it completes a working model of the product.** After this date, a company capitalizes all software production costs until the product is available for general release to customers. No software production costs may be capitalized after the product is ready for general release; they are expensed as incurred. The accounting for software production costs may be summarized as follows:



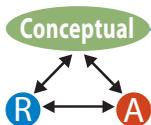
The company amortizes the capitalized software production costs incurred during the period between technological feasibility and general release over the expected life of the product, which typically will be a relatively short period, such as five years. The amortization expense is the greater of the amount calculated from either the

1. ratio of current gross revenues from the software to the total amount of current and anticipated future gross revenues from the software multiplied by the cost of the asset, or
2. straight-line method.



If the net realizable value of the software product is lower than the asset's book value, a company writes down the asset to this value and recognizes a loss. The lower value is then the new "cost" and the write-down may not be recovered. Note that two new concepts are involved. First, a new concept of amortization based on estimated revenues is introduced. Second, the lower of cost or market method is applied to this one intangible asset.

The second category of costs is the **unit cost of producing the software**. This would include amounts for the cost of the disks and duplication of the software, packaging, documentation, and training materials. A company records these unit costs as inventory and expenses them as cost of goods sold when it recognizes the related revenue. The third category of costs is the **maintenance and customer support costs** incurred after the software is released. These costs are expensed as incurred.



Conceptual Evaluation

FASB Statement No. 86 resulted in most computer software costs being expensed because, for many companies, the detailed program design occurs after the detailed logic of the program is complete and after coding has already begun. For many companies, software may be a significant, or perhaps the only, revenue-generating asset. As the U.S. economy moves toward intangible outputs and creative processes, accounting could accommodate this transition by allowing the results of a company's creative processes to be recorded as an asset when they are likely to result in probable future cash flows. Another issue is that many costs incurred before the completion of the detailed program design are not part of research and development but are incurred to perform an activity, just like other production processes. Therefore, *FASB Statement No. 86* expands the definitions of research and development established in *FASB Statement No. 2*. Finally, the amount of cost that a company may capitalize depends on how it organizes its programming process and, in particular, the date on which it establishes technological feasibility. Because the capitalization criterion is based on a point in time rather than a function, the costs capitalized may vary

significantly from company to company depending on whether the coding and testing parallels, or follows, the detailed program design.



LINK TO ETHICAL DILEMMA

Quality Technology Systems (QTS) is a high-technology company that focuses on developing software that controls and manages industrial machinery used in automated manufacturing processes. As an accountant for QTS, one of your responsibilities is to determine which expenditures can be capitalized as software development costs. Because you are not an expert in software design, you rely extensively on status reports provided by the company's engineering department and have, over the years, developed a friendship with one of the engineers. Based on the latest status report, you have decided that a new wireless operating system had reached technological feasibility, which resulted in the capitalization of approximately \$1,000,000 during the current quarter.

During lunch today, you mention to the engineer that you were impressed at the progress they had made on the wireless operating system. After making you promise that you would not repeat anything he says, the engineer responded that the project has really been time-consuming, and he wasn't sure if it would ever result in a functioning technology. In fact, recent setbacks had resulted in much of the previous work being scrapped and the project effectively having to start over from scratch. He further confided in you that he overheard a conversation between the CEO and the chief engineer in which the CEO instructed the engineer to achieve technological feasibility by the end of the quarter "by any means necessary." What are your responsibilities upon learning of these events?

Internal-Use Software

AICPA Statement of Position No. 98-1 specifies the accounting for the costs of internal-use computer software.¹¹ Costs that are incurred in the preliminary stage of development are expensed as incurred. Capitalization of costs begins when

1. the preliminary stage is completed, and
2. management agrees to fund a computer software project and
 - (a) it is probable that the project will be completed, and
 - (b) the software will be used to perform the function intended.

Once a company has met these capitalization criteria, it capitalizes the cost of

1. external direct costs of materials and services used in developing the internal-use software,
2. payroll costs for employees who are directly associated with the project, and
3. interest costs incurred when developing the software.

The company then amortizes the capitalized cost using the straight-line method over the estimated useful life of the software unless another method provides better matching.

11. "Accounting for the Costs of Computer Software Developed or Planned for Internal Use," *AICPA Statement of Position No. 98-1* (New York: AICPA, 1998).

Training costs for using the software are expensed as incurred. Costs incurred for upgrades and enhancements of the software are capitalized if they meet the capitalization criteria of the *SOP*. However, costs incurred for maintaining the software are expensed as incurred. Impairment is measured and recognized according to *FASB Statement No. 144*.

Leases and Leasehold Improvements



Leases (or leaseholds) are intangible assets because a right to use the property is held by the lessee, but the property itself is still owned by the lessor. However, capital leases are normally included on the lessee's balance sheet within its property, plant, and equipment rather than under intangible assets, as we discuss in Chapter 21. Leasehold improvements are also intangible assets of the lessee but normally are included as a separate item in its property, plant, and equipment, as we discussed in Chapter 10.

Trademarks and Tradenames

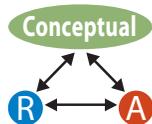
Registration of a trademark or tradename with the U.S. Patent Office establishes a right to exclusive use of a name, symbol, or other device used for product identification (e.g., *Coke™* or *Scotch™ Tape*). The right lasts for 20 years and is renewable indefinitely as long as the trademark or tradename is used continuously. Therefore, it typically is considered to have an indefinite life and is not amortized (unless the company decides its useful life is no longer indefinite). The company must review the asset for impairment at least annually, as we discussed earlier.

Deferred Charges

Deferred charges (or other "noncurrent assets") is a category often used on a company's balance sheet as a catchall category in which it accumulates several individually immaterial items. Examples of items included are intangibles from any of the categories previously discussed if the company does not include intangibles as a separate category in the balance sheet. In addition, long-term prepayments such as for insurance, rent, taxes, or moving and plant rearrangement costs may be included in deferred charges. All deferred charges are amortized over their expected economic lives. As we discussed in Chapter 4, most of these deferred charges can, and should, be included in other asset categories on the company's balance sheet.

Organization Costs

When a corporation is formed, it incurs organization costs such as legal fees, stock certificate costs, underwriting fees, accounting fees, and promotional fees. Because these costs are essential to forming a corporation and the life of the company is indefinite, it can be argued that these organization costs are an intangible asset with an indefinite life.



However, *AICPA Statement of Position No. 98-5* (which we discussed in Chapter 10) requires that the costs of start-up activities (including organization costs) be expensed as incurred.¹² An argument in favor of expensing the organization costs is that once the costs have been incurred and the company is formed, all the benefits associated with the costs have been realized. However, it can be argued that the matching principle is violated because the cost of forming the company is not matched against the revenue generated by the newly formed company. Also, income tax regulations allow organization costs to be amortized and deducted from taxable income over 60 months.

12. "Reporting on the Costs of Start-Up Activities," *AICPA Statement of Position No. 98-5* (New York: AICPA, 1998).



LINK TO INTERNATIONAL DIFFERENCES

International accounting standards allow a company to record some internally generated intangibles as assets. Specifically, the company must classify activities leading to the generation of an intangible asset into a research and a development phase. Research costs are expensed but development costs may be capitalized if the company can demonstrate that the asset will generate probable future economic benefits. Also, the costs of items that are acquired for a particular research project and have no alternative future uses are expensed as the items are used in the project. In contrast, such costs are expensed when incurred under U.S. GAAP. Finally, international accounting standards allow intangibles to be revalued upwards. For example, in the United Kingdom, brand names such as Schweppes are accounted for in this manner.

UNIDENTIFIABLE INTANGIBLES

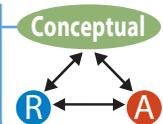
We discussed identifiable intangible assets in previous sections of this chapter. However, many additional intangibles of a company also contribute to its earning power. These unidentifiable intangibles are often called “goodwill.” Accounting for such goodwill depends on whether it is internally developed or purchased through a transaction.

Internally Developed Goodwill

All companies develop unidentifiable intangibles. For example, employees at all levels are an integral part of a company. They are a key component in using the assets and that produce the company’s products and services. Superior employees may produce the products with a higher quality and enable a company to earn a higher income. Also, service companies and companies that produce computer software rely almost entirely on their employees to generate revenue, yet record no asset related to their skills and talents. This unrecorded “asset” is often referred to as “intellectual capital.” Another example of an unidentifiable intangible is a company that has an advantageous geographical location. Perhaps it is closer to its raw materials or suppliers or to its major customers. Such a geographical advantage may enable the company to earn a higher income. Yet a company’s balance sheet does not include assets relating to such internally developed intangibles as quality, reputation, human resources, or geographical location.¹³

Two characteristics distinguish intangibles of this type. First, they are considered to be unidentifiable because they are not separable from the identified and recorded assets. For example, the employees of the company cannot be sold to another company, and the geographical location cannot be sold without selling the other assets of the company. Second, measuring the value of these unidentifiable intangibles would be very difficult and less *reliable* than measuring the value of identifiable intangibles. Because of these two characteristics, the costs associated with such *internally developed* intangibles (internally developed goodwill) are expensed as incurred.

6 Account for unidentifiable tangibles, including internally developed and purchased goodwill.



Purchased Goodwill

Goodwill arises when a company is purchased. It is the difference between the purchase price of the acquired company and the fair value of the reported identifiable

13. A few attempts have been made to value human resources and record them on the balance sheet. See, for instance, E. H. Caplan and S. Landkitch, *Human Resource Accounting* (New York: National Association of Accountants, 1974).

net assets. Goodwill is recorded only when a transaction occurs—that is, when a company (or a significant part of a company) is purchased by another company. The purchased goodwill is the price paid by the acquiring company for the unidentifiable intangibles that were internally developed by the acquired company. It is recorded as an asset by the acquiring company because a transaction has occurred that establishes a *reliable* valuation. From this perspective, goodwill is a residual valuation account for the additional value of the unidentifiable intangible assets. In other words, it is the amount paid in excess of the cost of the identifiable net assets (assets less liabilities) acquired. The capitalization of purchased goodwill is required by **FASB Statement No. 141**, which defines goodwill as the excess of the cost of an acquired entity over the net of the amounts assigned to assets acquired and liabilities assumed.¹⁴

Example: Recording the Purchase

The purchase of a company can be a very complex matter. To show a simple alternative, suppose that after negotiation the Sara Company purchases all the assets of the Trevor Company for \$790,000 cash and the Trevor Company is dissolved. If the Trevor Company has identifiable assets with a fair value of \$920,000 and liabilities with a fair value of \$530,000, Sara Company would record the purchase as follows:

Identifiable Assets	920,000	
Goodwill	400,000	
Liabilities		530,000
Cash		790,000

To record an actual purchase, instead of debiting Identifiable Assets and crediting Liabilities as shown, the company would debit or credit each of the individual asset and liability accounts based on their current fair values. Also, if the Trevor Company had any “in-process” R&D, the Sara Company would expense that amount of the purchase price. Alternatively, if the Trevor Company is not dissolved, the Sara Company would record the entire purchase cost in an Investments account. Then, it would use the equity method (discussed in Chapter 15) and consolidated financial statements (discussed in advanced accounting books) to account for and report on the investment. ♦

Impairment of Goodwill

A company must review its goodwill for impairment at least annually at the reporting unit level. (Goodwill is not amortized.¹⁵) The reporting unit is the same as the operating segment that we discussed in Chapter 6 for segment reporting. A company must also review its goodwill for impairment whenever events or changes in circumstances occur that would more-likely-than-not reduce the fair value of the goodwill below its carrying value. Examples include: a significant adverse change in the business climate or market, a legal issue, an action by regulators, unanticipated competition, a loss of key personnel, and an expectation that a reporting unit may be sold.

A company reviews its purchased goodwill for impairment using two steps. First, it compares the fair value of the reporting unit with its book value (including goodwill).¹⁶ The fair value of a reporting unit is the amount at which the unit could be bought or sold in a current transaction between willing parties. Sometimes this information is not available. In this case, the company might determine the reporting unit’s fair value by multiplying the market price of its common stock by the number of shares outstanding (known as the *market cap*). However, the reporting unit may not have shares that trade in

14. “Business Combinations,” *FASB Statement of Financial Accounting Standards No. 141* (Norwalk, Conn.: FASB, 2001), Appendix E.

15. Before *FASB Statement No. 142*, goodwill was amortized over its useful life, not to exceed 40 years.

16. Impairment tests must be performed on other assets of the reporting unit first, so that the resulting fair value of the reporting unit that is less than the book value must be from goodwill impairment.

an active market. In this case, estimates of the fair value may be based on valuation techniques, such as multiples of earnings or revenues, or measured as the present value of the estimated future cash flows of the reporting unit. Those cash flow estimates must be based on reasonable assumptions and should consider all available evidence.

If the fair value of the reporting unit is greater than the book value, goodwill is not impaired, and the second step is not necessary. If the fair value of the reporting unit is *less than* its book value, the second step of the impairment test must be performed to measure the *amount* of the impairment loss, if any. The second step is the recognition of an impairment loss for the amount by which the implied fair value of the goodwill is less than its carrying value.

To determine the implied fair value of the goodwill, the company first allocates the fair value of the reporting unit to all the identifiable assets and liabilities of the unit as if the unit had been acquired and the fair value was the purchase price. Then the implied fair value of the goodwill is the excess “purchase price” over the amounts assigned to the identifiable assets and liabilities. The impairment loss is the difference between the carrying value of the goodwill and the lower implied fair value of the goodwill. When the company records the impairment loss, it reduces the carrying value of the goodwill to the lower fair value.

Example: Goodwill Impairment

Suppose that the Kent Company purchased the Devon Company as a subsidiary several years ago. The Devon Company has a book value (assets minus liabilities) of \$3.6 million, including goodwill of \$400,000. To test for the impairment of its goodwill, the Kent Company first estimates that the fair value of the Devon Company is \$3 million. Because this \$3 million fair value is less than its \$3.6 million book value, the Kent Company must perform the second step. If Kent allocates \$2.7 million of the fair value to Devon Company’s identifiable assets and liabilities, this means that \$300,000 (\$3 million – \$2.7 million) is the implied fair value of the goodwill. Because the \$300,000 implied fair value of the goodwill is \$100,000 less than the \$400,000 carrying value, Kent Company records the \$100,000 impairment loss as follows:

Impairment Loss on Goodwill	100,000	
Goodwill		100,000

Kent Company reports the impairment loss as a separate line item on its income statement as part of income from continuing operations. It reports the new (reduced) \$300,000 carrying value on its ending balance sheet. Every year, Kent Company must compare the fair value with the \$300,000 carrying value to determine if the goodwill is again impaired.



Note also that the book value of the Devon Company’s identifiable net assets is \$3,200,000 (\$3,600,000 – \$400,000 goodwill). Because the fair value of the identifiable net assets is \$2,700,000, the Kent Company should recognize additional impairment losses of \$500,000 (\$2,700,000 – \$3,200,000) on the relevant assets. It is likely that other intangible assets recorded at the time of the purchase of the Devon Company are impaired. Other assets that may also be impaired include accounts receivable, inventory, property, plant and equipment, and investments (which we discuss in Chapter 15). ♦

Negative Goodwill

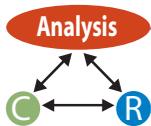
The discussion and examples in this chapter have assumed that purchased goodwill is positive. That is, the price paid for the company is greater than the fair value of the net assets acquired. However, it is possible that the cash paid is less than the fair value of the net assets acquired. In this case goodwill is a negative amount. This situation tends to raise questions about the rational behavior of the parties involved. The best course of action for the current owners of the company would be to liquidate it rather than to sell it. An exception is when the acquisition is made by buying common stock that is trading at less than the value of the net assets.

If such a purchase transaction does occur, *FASB Statement No. 141* requires that negative goodwill *not* be recorded. Instead, the acquiring company allocates the negative amount proportionately to reduce the amounts assigned to the noncurrent assets acquired. The exceptions to this allocation are financial assets other than those accounted for by the equity method, assets to be sold, deferred tax assets (discussed in Chapter 19), prepaid assets relating to pension and other postretirement benefits (discussed in Chapter 20), and any other current assets. Any excess that remains after reducing those assets to zero is reported as an extraordinary gain (as we discussed in Chapter 5).

Estimating the Value of Goodwill

When one company is negotiating to buy another company, the price offered is typically much greater than the book value of the net assets to be acquired. Three factors can account for the difference between the value of the company as a whole and the book value of the net assets (assets less liabilities). First, **identifiable net assets are generally listed on the balance sheet at their historical costs**. While some assets and liabilities are listed at amounts that approximate their fair values, others (such as land and buildings) may have current fair values that are very different from the recorded historical costs. Second, **identifiable intangible assets may be unrecorded** (or undervalued). As we discussed earlier in the chapter, R&D costs and operating costs are expensed as incurred. Therefore, internally developed intangibles either are not recorded or are recorded at only the costs directly associated with the intangible after all R&D costs and operating costs have been expensed. Third, **unidentifiable intangibles may exist that are categorized as goodwill**.

There are several methods that might be used to estimate the value of the goodwill for a purchased company. The most conceptually correct way is to compute the present value of a purchased company's estimated "excess" earnings. This involves four steps: (1) estimate the company's future annual earnings, (2) calculate an appropriate annual future return on the fair value of the company's identifiable net assets, (3) subtract the amount in step 2 from the amounts in step 1 to determine the estimated excess average annual earnings, and (4) compute the present value of the amounts in step 3 using an appropriate discount rate. The amount calculated in step 4 is the estimated value of the purchased company's goodwill. However, remember that this method provides only an estimate of goodwill. The purchase price of a company must be agreed upon by both the purchaser and the seller. Therefore, the amount paid for goodwill in any purchase transaction is determined solely by the parties involved and is not defined by generally accepted accounting principles.



SECURE YOUR KNOWLEDGE 12-2

- Identifiable intangible assets may be purchased or sold separately from the other assets of a company and include patents, copyrights, franchises, computer software costs, and trademarks or tradenames.
- Only certain costs of internally developed identifiable intangible assets (e.g., costs of a successful legal defense of a patent, filing costs of a copyright) are capitalized; all other costs are expensed as incurred.
- Computer software costs are capitalized after technological feasibility of the product is established; these costs are amortized over the expected life of the product.
- The right to use a trademark or tradename that can be renewed indefinitely is considered to be an intangible asset with an indefinite life.
- Organization costs are expensed in the period incurred.

(continued)

- The primary unidentifiable intangible asset is goodwill and is measured as the difference between the purchase price of the acquired company and the fair value of its identifiable net assets.
- A two-step approach is used to test for an impairment of goodwill:
 - Step 1: Compare the fair value of the reporting unit with its book value to determine if goodwill may be impaired.
 - Step 2: Measure the impairment loss as the difference between the lower implied fair value of goodwill and the carrying value of goodwill.

DISCLOSURES FOR INTANGIBLE ASSETS

FASB Statement No. 142 requires a company to disclose certain information about its intangible assets, including:

1. In the period it acquires intangible assets:
 - a. The cost of any intangible assets acquired, separated into assets that are, and are not, amortized, and goodwill
 - b. For assets that are amortized, the residual value and the weighted-average amortization period
 - c. The cost of any research and development acquired and written off, and where it is included in the income statement
2. In each period for which it presents a balance sheet:
 - a. For intangible assets that are amortized, the total cost, the accumulated amortization, the amortization expense, and the estimated amortization expense for the next five years
 - b. For intangible assets that are not amortized, the total cost and the cost of each major intangible asset class
 - c. For goodwill, the amount of goodwill acquired and the amount of any impairment losses recognized
 - d. For any intangible asset impairment, the facts leading to the impairment, the amount of the impairment loss, and the method of determining the fair value

In addition, a company must report, as a minimum, the total of all identifiable intangible assets as a separate line item (asset) on the balance sheet. A company must include amortization expense and impairment losses in its income from continuing operations. It must report goodwill impairment losses as a separate line item in income from continuing operations (unless the impairment is related to a discontinued operation).

Real Report 12-1 shows the disclosures of intangible assets by Johnson & Johnson.

Real Report 12-1 Disclosure of Intangible Assets

JOHNSON & JOHNSON AND SUBSIDIARIES

Notes to Financial Statements (in part)

1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (in part)

GOODWILL AND INTANGIBLE ASSETS

SFAS No. 142 requires that goodwill and non-amortizable intangible assets be assessed annually for impairment. The Company completed the annual impairment test in the fourth quarter and no impairment was determined. Future impairment tests will be performed in the fiscal fourth quarter, annually.

Intangible assets that have finite useful lives continue to be amortized over their useful lives, and are reviewed for impairment when warranted by economic conditions.

Continued

7 Understand the disclosure of intangibles.



7 INTANGIBLE ASSETS

At the end of 2004 and 2003, the gross and net amounts of intangible assets were:

(Dollars in Millions)	2004	2003
Goodwill—gross	\$ 6,597	\$ 6,085
Less accumulated amortization	734	695
Goodwill—net	<u>\$ 5,863</u>	<u>\$ 5,390</u>
Trademarks (non-amortizable)—gross	\$ 1,232	\$ 1,098
Less accumulated amortization	142	136
Trademarks (non-amortizable)—net	<u>\$ 1,090</u>	<u>\$ 962</u>
Patents and trademarks—gross	\$ 3,974	\$ 3,798
Less accumulated amortization	1,125	818
Patents and trademarks—net	<u>\$ 2,849</u>	<u>\$ 2,980</u>
Other intangibles—gross	\$ 3,302	\$ 3,187
Less accumulated amortization	1,262	980
Other intangibles—net	<u>\$ 2,040</u>	<u>\$ 2,207</u>
Total intangible assets—gross	\$15,105	\$14,168
Less accumulated amortization	3,263	2,629
Total intangible assets—net	<u>\$11,842</u>	<u>\$ 11,539</u>

Goodwill as of January 2, 2005, as allocated by segments of business is as follows:

(Dollars in Millions)	Consumer	Pharm	Med Dev and Diag	Total
Goodwill, net of accumulated amortization at December 28, 2003	\$ 882	\$781	\$3,727	\$5,390
Acquisitions	232	32	138	402
Translation & other	46	19	6	71
Goodwill at January 2, 2005	<u>\$1,160</u>	<u>\$832</u>	<u>\$3,871</u>	<u>\$5,863</u>

The weighted average amortization periods for patents and trademarks and other intangible assets are 15 years and 17 years, respectively. The amortization expense of amortizable intangible assets for the fiscal year ended January 2, 2005, was \$603 million before tax. Certain patents and intangibles were written down to fair value during 2004 with the resulting charge included in amortization expense. The estimated amortization expense for the five succeeding years approximates \$550 million before tax, per year. Substantially all of the amortization expense is included in cost of products sold.

Questions:

1. Why does Johnson & Johnson classify "Trademarks" as non-amortizable?
2. As of the end of 2004, how many more years does Johnson & Johnson expect "Patents and Trademarks" to provide value to the company?
3. What is important about allocating goodwill to various segments of the business?

- 8** Explain the conceptual issues regarding intangibles.

CONCEPTUAL EVALUATION OF ACCOUNTING FOR INTANGIBLES

Generally accepted accounting principles for internally developed and purchased intangibles are complex and have some inconsistencies. For example, earlier in the chapter we discussed the arguments for and against expensing the R&D costs incurred by a company. Also, when one company acquires another company, it may acquire the R&D that is in-process in

that other company. The acquiring company expenses, at the date of purchase, the cost of that in-process R&D. This is consistent with the principle of expensing R&D costs incurred by a company but is inconsistent with the general rule that items purchased are assets. It is possible that the purchasing company may have an incentive to reduce or increase the amount of the purchase price it allocates to the acquired in-process R&D. A reduction would increase the amount the company assigns to goodwill and reduce the total expenses it will recognize (unless the goodwill becomes impaired). An increase would reduce the assets reported on its balance sheet and increase its rate of return in future periods.

Another inconsistency may occur because only purchased goodwill is recorded as an asset, while internally developed goodwill is expensed. Suppose Conner Company internally develops goodwill, while Schuster Company has purchased a company identical to Conner and records goodwill as an asset. Both companies expense the continuing costs of developing internal goodwill, but only Schuster Company reports a goodwill asset. However, there are two different elements. One is the recognition of goodwill that was developed in the *past* and was purchased; the other is the expensing of the costs of internally generated goodwill in the *current period*.

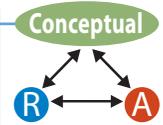
There are three major arguments in favor of expensing internally generated goodwill. First, it would be very difficult to measure the cost of internally generated goodwill to reliably record the cost as an asset. Second, to capitalize internally developed goodwill would raise issues similar to those for R&D, such as which costs should be capitalized and which should be expensed. For example, do some or all of a company's marketing costs provide benefits for just the current period, or do they also provide benefits for future periods? Third, capitalization would require amortization of those assets with a finite life. However, it would be very difficult to identify the revenues generated and therefore to decide over which periods, and by which method, to match the amortization expense against the benefits.

The FASB argued that not amortizing certain intangible assets is appropriate because they have indefinite future lives, and amortizing those assets would not meet the criterion of being *representationally faithful*. To classify an asset as having an indefinite life requires the asset to generate cash flows indefinitely. Examples of such intangible assets may include airport route authorities, certain trademarks, and taxicab medallions. There is little disagreement that these few intangible assets that have an indefinite life should not be amortized until there is evidence that they have a finite life.

An argument in favor of capitalizing purchased goodwill is that the cost of purchased goodwill is *reliable* because it is based on an exchange price (the cost of purchasing the company). The decision not to require amortization of purchased goodwill was more controversial. The FASB argued that the life of goodwill cannot be predicted with a satisfactory level of *reliability*, nor can the pattern of benefits it generates. Therefore, the amount that would be amortized would be only a rough estimate of the decrease in goodwill for the period. The FASB also argued that many financial analysts ignore goodwill amortization in their evaluation of a company's income.

In contrast, many people argue that purchased goodwill is an asset with benefits that expire over time and therefore it should be amortized over a maximum life of, for example, 20 years. Supporters of this view argue that the goodwill recorded as a result of a transaction is an asset that is consumed over time and is replaced by internally generated goodwill. Many of these people would also argue that internally generated goodwill should also be capitalized and amortized over its useful life.

Another alternative considered by the FASB was to require the immediate write off of purchased goodwill. The Board rejected this alternative because the goodwill that is acquired and paid for meets the definition of an asset. It is also difficult to argue that the amount paid for goodwill suddenly has no value. However, this alternative was supported by **Accounting Research Study No. 10**.¹⁷ Several major arguments can be made in



17. G. R. Catlett and N. O. Olson, "Accounting for Goodwill," *Accounting Research Study No. 10* (New York: AICPA, 1968).

favor of this position. First, purchased goodwill is different in nature than a company's other assets and cannot be sold or used independently of the other assets. Therefore, it is inappropriate to include it with the other assets on the company's balance sheet. Second, because internally developed goodwill is expensed immediately, this alternative creates a degree of consistency between internally developed and purchased goodwill. Third, as it is so difficult to estimate the life of the benefits, any choice of periods over which to amortize the goodwill is arbitrary, thus immediate write-off is justifiable.

Intangible assets are amortized over 15 years for computing taxable income. Therefore, there is a temporary difference between financial income and taxable income for intangible assets (unless those with a finite life are amortized for over 15 years for computing financial income). This temporary difference results in deferred income taxes. Some users would argue that for a growing company (which is increasing its tangible assets), there is no temporary difference because the company will never pay the deferred taxes. Some users would also argue that reporting deferred taxes for goodwill is not appropriate because there is no temporary difference since the goodwill is not being systematically amortized.

Once the FASB concluded that goodwill (and intangible assets with indefinite lives) would not be amortized, it had to develop an impairment test, as we discussed earlier in this chapter. Because the impairment test has to be applied annually, it may add a significant cost to companies. Many users are also concerned that the impairment loss will not be *reliable* because of the numerous estimates that a company has to make.

SUMMARY

At the beginning of the chapter, we identified several objectives you would accomplish after reading the chapter. The objectives are listed below, each followed by a brief summary of the key points in the chapter discussion.

1. **Explain the accounting alternatives for intangibles.** The cost of a purchased identifiable intangible with a finite life is recorded as an asset and is amortized. The cost of a purchased identifiable intangible with an indefinite life and an unidentifiable intangible (goodwill) is recorded as an asset and is reviewed for impairment annually (but not amortized). The cost of an internally developed identifiable intangible is recorded as an asset and is amortized, except for research and development costs, which are expensed as incurred. The cost of an internally developed unidentifiable intangible is expensed as incurred.
2. **Understand the amortization or impairment of intangibles.** An intangible asset with a finite life must be amortized over its economic life. A company selects the amortization method based on the expected pattern of benefits that the intangible asset will produce, but if the company cannot reliably determine the pattern it uses the straight-line method. An intangible asset with an indefinite life is not amortized but is reviewed for impairment at least annually. A company tests an intangible asset for impairment by first estimating the fair value of the asset. An intangible asset is impaired when its fair value is less than its carrying value. The impairment loss is the amount by which the fair value is less than the carrying value.
3. **Identify research and development costs.** Research is the planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product or service, or a new process or technique, or in bringing about a significant improvement to an existing product or process. Development is the translation of research findings or other knowledge into a plan or design for a new product or process, or for a significant improvement to an existing product or process, whether intended for sale or use. Research and development costs include materials, equipment, and facilities, personnel, intangibles purchased from others, contract services, and indirect costs. Research and development costs are expensed, including the costs of materials, equipment, facilities, and intangibles purchased from others that have no alternative future uses.
4. **Explain the conceptual issues for research and development costs.** The conceptual alternatives for research and development costs are to expense all costs as incurred, to capitalize all costs as incurred and amortize them over the periods expected to benefit, to capitalize costs when incurred if specified conditions are fulfilled and record all other costs as expenses, and to accumulate all costs in a special category until the existence of future benefits can be determined.

5. **Account for identifiable intangible assets including patents, copyrights, franchises, computer software costs, and trademarks and tradenames.** Each of these identifiable intangible assets is recorded at cost and amortized over its economic life, unless it has an indefinite life, such as trademarks and tradenames, in which case it is reviewed for impairment annually.
6. **Account for unidentifiable intangibles including internally developed and purchased goodwill.** The costs of internally developed goodwill are expensed as incurred. Purchased goodwill arises when a company is acquired and is the difference between the purchase price of the company and the fair value of the identifiable net assets. Purchased goodwill is recorded as an asset and is reviewed for impairment annually at the reporting unit level. A company uses a two-step approach. First, the company compares the fair value of the reporting unit with its book value. If the fair value is less than the book value, the second step must be performed. The company first allocates the fair value of the reporting unit to all the identifiable assets and liabilities of the unit as if the unit had been acquired. The implied fair value of the goodwill is the excess “purchase price” over the amount assigned to the identifiable assets and liabilities. The impairment loss is the difference between the carrying value of the goodwill and the lower implied fair value.
7. **Understand the disclosure of intangibles.** A company must disclose its total research and development expense. Intangible assets and goodwill are distinguished from tangible assets in the financial statements. A company must also disclose amortization expense, impairment losses, the method and period of amortization, as well as other disclosures.
8. **Explain the conceptual issues regarding intangibles.** The major conceptual issues are whether some internally developed intangibles, such as research and development, should be capitalized, and whether some intangible assets, such as purchased goodwill, should be amortized instead of being reviewed for impairment.

ANSWERS TO REAL REPORT QUESTIONS

Real Report 12-1 Answers

1. Intangible assets with indefinite lives are not amortized but reviewed for impairment. For Johnson & Johnson, a portion of the trademarks are considered intangible assets with indefinite lives and are tested for impairment annually in the fourth quarter of each fiscal year.
2. The average life of Johnson & Johnson’s patents and trademarks can be calculated by dividing accumulated amortization of the patents and trademarks (\$1,125) by the gross amount of the patents and trademarks (\$3,974), which gives a percentage of the intangible assets that have been amortized (28.3%). Therefore, approximately 71.7% (100% – 28.3%) of the patents and trademarks value remains to be amortized.
3. Multiplying this by an expected useful life of 15 years (for patents) and 17 years (for trademarks), it appears that Johnson & Johnson expects to receive benefits related to its patents and trademarks for another 11 to 12 years, respectively.
3. A company is required to review its goodwill for impairment at least annually, and this impairment test is to be performed at the reporting unit level. The reporting unit level is generally the same as the operating segment. Therefore, this provides the financial statement user with insights into the operations of the company. For example, goodwill increased by \$402 million in the current year because of acquisitions. Of this amount, over half (\$232 million) related to the consumer segment.

QUESTIONS

- Q12-1** How are intangible assets distinguished from tangible assets? What do they have in common?
- Q12-2** How are identifiable intangibles distinguished from unidentifiable intangibles?
- Q12-3** Explain how a company accounts for the cost of identifiable and unidentifiable intangibles.
- Q12-4** Are all intangible assets amortized? If not, which ones are not? Why?
- Q12-5** Which amortization method is required for intangibles? Are there any exceptions?
- Q12-6** What factors should a company consider in estimating the useful life of an intangible?
- Q12-7** What is meant by the terms *research* and *development*?
- Q12-8** What activities are included in R&D? Which are excluded?
- Q12-9** What expenditures for R&D does a company include in R&D costs?

M12-7 Goodwill represents the excess of the cost of an acquired company over the

- Sum of the fair values assigned to tangible assets acquired less liabilities assumed
- Sum of the fair values assigned to identifiable assets acquired less liabilities assumed
- Sum of the fair values assigned to intangible assets acquired less liabilities assumed
- Book value of an acquired company

M12-8 During 2003, Traco Machine Company spent \$176,000 on research and development costs for an invention. This invention was patented on January 2, 2004 at a nominal cost that was expensed in 2004. The patent had a legal life of 20 years and an estimated useful life of eight years. In January 2008 Traco paid \$16,000 for legal fees in a successful defense of the patent. Amortization for 2008 should be

- | | |
|------------|-------------|
| a. \$0 | c. \$4,000 |
| b. \$1,000 | d. \$26,000 |

M12-9 Which of the following amounts incurred in connection with a trademark should be capitalized?

	Cost of a Successful Defense	Registration Fees
a.	Yes	No
b.	Yes	Yes
c.	No	Yes
d.	No	No

M12-10 Sherwood Corporation incurred \$68,000 of research and development costs in its laboratory to develop a patent that was granted on January 2, 2007. Legal fees and other costs associated with registration of the patent totaled \$13,600. Sherwood estimates that the economic life of the patent will be eight years. What amount should Sherwood charge to patent amortization expense for the year ended December 31, 2007?

- | | |
|----------|-------------|
| a. \$0 | c. \$1,700 |
| b. \$800 | d. \$10,200 |

EXERCISES

E12-1 Cost of a Patent The Befort Company filed for a patent on a new type of machine. The application costs totaled \$12,000. R&D costs incurred to create the machine were \$75,000. In the year in which the company filed for and received the patent, it spent \$20,000 in the successful defense of a patent infringement suit.

Required

- At what amount should the company capitalize the patent?
- How would you determine the economic life of the patent?

E12-2 Cost of a Patent On January 3, 2007 the Franc Company purchased for \$27,000 a patent that had been filed eight years earlier. The patent covers a manufacturing process that the company plans to use for 15 years. On January 2, 2008 the company paid its lawyers \$10,000 for successfully defending the patent in a lawsuit.

Required

Prepare all the journal entries associated with the patent in 2007 and 2008.

E12-3 Cost of a Tradename On January 10, 2007 the Hughes Company applied for a tradename. Legal costs associated with the application were \$20,000. In January 2008 the company incurred \$8,000 of legal fees in a successful defense of its tradename. The tradename was not impaired in 2007 and 2008.

Required

Compute the ending carrying value of the tradename for 2007 and 2008. Should the company amortize the tradename?

E12-4 Start-Up Costs Kling Company was organized in late 2007 and began operations on January 2, 2008. Prior to the start of operations, it incurred the following costs:

Costs of hiring new employees	\$ 3,000
Attorney's fees in connection with the organization of the company	12,000
Improvements to leased offices prior to occupancy (10-year lease)	6,000
Costs of pre-opening advertising	5,000

Required

What amount should the company expense in 2007? In 2008?

E12-5 Research and Development Costs The KLK Clothing Company manufactures professional clothing for women. In order to keep costs low while still producing quality clothes, KLK conducts many research and development projects. On a current project, KLK researchers used \$35,000 of cotton and \$27,000 of wool from its inventory. KLK paid its researchers \$30,000 in wages and purchased a special weaving machine for \$60,000 cash. The machine was not suitable for use in production activities and was not expected to be used in other research projects. In addition, depreciation of the project's research lab amounted to \$20,000.

Required

Prepare the journal entry to record KLK's research and development costs.

E12-6 AICPA Adapted *Research and Development Costs* In 2007, Lalli Corporation incurred R&D costs as follows:

Materials and equipment	\$100,000
Personnel	100,000
Indirect costs	<u>50,000</u>
	<u>\$250,000</u>

These costs relate to a product that will be marketed in 2008. The company estimates that these costs will be recouped by December 31, 2011.

Required

What is the amount of R&D costs expensed in 2007?

E12-7 *Research and Development Activities* Which of the following activities are considered R&D? Justify your reasons for each answer.

1. Building an oil shale plant to test the feasibility of large-scale exploitation
2. Testing a new type of machine to evaluate its potential usefulness in production
3. Modifying a machine to make it suitable for filling a customer's order
4. Designing a new plant to produce the same products more efficiently
5. Testing in an attempt to find a more efficient production method

E12-8 *Research and Development Costs* Which of the following are included in R&D costs of the current period? Justify each answer.

1. Current-period depreciation on the building housing the R&D activities
2. Cost of a market research study
3. Current-period depreciation on a machine used in R&D activities
4. Salary of the director of R&D
5. Salary of the vice president who spends one-third of her time overseeing the R&D activities
6. Pension costs for the salaries in items 4 and 5

E12-9 *Intangibles* The Barnum Company acquired several small companies at the end of 2006 and, based on the acquisitions, reported the following intangibles in its December 31, 2006 balance sheet:

Patent	\$20,000
Tradename	35,000
Computer software	10,000
Goodwill	90,000

The company's accountant determines the patent has an expected life of 10 years and no expected residual value, and that it will generate approximately equal benefits each year. The company expects to use the tradename for the foreseeable future. The accountant knows that the computer software is used in the company's 120 sales offices. The company has replaced the software in 60 offices in 2007, and expects to replace the software in 40 more offices in 2008 and the remainder in 2009.

Required

How much amortization expense should the company recognize on each intangible asset in 2007?

E12-10 *Tradename* Probst Company acquired a tradename several years ago at a cost of \$60,000. The company has never considered the tradename to be impaired. However, at the end of 2007, the company has determined that the tradename is impaired because of a change in market conditions. It estimates that the tradename has a fair value of \$40,000 at the end of 2007.

Required

Prepare the journal entry (if any) for Probst Company to record the impairment of its trademark at the end of 2007.

E12-11 *Goodwill* Several years ago, Blaha Company purchased Husker Company as a subsidiary. At that time, Blaha Company recorded goodwill of \$100,000 related to the purchase. Since that time, the company has not considered the goodwill to be impaired. However, at the end of 2007, Blaha Company decides to evaluate the goodwill for impairment because of technological changes in the industry. The subsidiary has a book value (including the goodwill) of \$900,000. Blaha Company estimates that the fair value of the subsidiary is \$720,000, of which it allocates \$660,000 to the subsidiary's identifiable assets and liabilities.

Required

Prepare the journal entry (if any) for Blaha Company to record the impairment of its goodwill at the end of 2007.

E12-12 Goodwill The Marino Company had the following balance sheet on January 1, 2007:

Current assets	\$ 50,000	Current liabilities	\$ 30,000
Property, plant, and equipment	200,000	Noncurrent liabilities	100,000
Intangible assets	<u>20,000</u>	Stockholders' equity	<u>140,000</u>
	<u>\$270,000</u>		<u>\$270,000</u>

On January 2, 2007 the Paul Company purchased the Marino Company by acquiring all its outstanding shares for \$300,000 cash. On that date the fair value of the current assets was \$40,000, and the fair value of the property, plant, and equipment was \$240,000. In addition, the fair value of a previously unrecorded intangible asset was \$25,000.

Required 

Compute the goodwill associated with the purchase of the Marino Company.

PROBLEMS

P12-1 Cost of Intangibles The Brush Company engaged in the following transactions at the beginning of 2007:

1. Purchased a patent for \$70,000 that had originally been filed in January 2001. The purchase was made to protect another patent that the company had filed for in January 2003 and subsequently received.
2. Purchased the rights to a novel by a best-selling novelist in exchange for 10,000 shares of \$10 par value common stock selling for \$60 per share. The book sells one million copies in 2007 and is expected to sell a total of 500,000 copies in future years.
3. Purchased the franchise to operate a ferry service from the state government for \$10,000. A bridge has been planned to replace the ferry, and it is expected that it will be completed in five years. Brush hopes that the ferry will continue as a tourist attraction, but profits are expected to be only 20% of those earned before the bridge is opened.
4. Paid \$28,000 of legal costs to successfully defend the patent acquired in transaction 1.
5. Paid a race car driver \$50,000 to have the Brush Company name prominently displayed on his car for two years.

Required

Prepare journal entries to record the preceding transactions, including the first year's amortization of intangible assets where appropriate. Amortize over the legal life unless a better alternative is indicated.

P12-2 Cost of Intangibles The Byrd Corporation engaged in the following transactions at the beginning of 2007:

1. Purchased a Hogburger franchise for a five-year, \$60,000, 10%-interest-bearing note. The franchise has an indefinite life providing the terms of the franchise are not violated.
2. Sold a tradename for \$50,000. The tradename had a carrying value of \$5,000.
3. Paid an advertising agency \$60,000 to develop a two-year advertising campaign to promote a new tradename.
4. Incurred legal fees of \$5,000 to register a new tradename.
5. Purchased the copyright to a new movie for \$500,000. The movie is made during 2007 at a cost of \$15 million. It will begin showing in 2008 and is expected to gross \$10 million during 2008, \$20 million during 2009, and \$10 million during 2010.

Required

Prepare journal entries to record the preceding transactions, including any appropriate adjusting entries for 2007.

P12-3 Correct Classification of Intangibles During the current year, the accountant for the Cartwright Corporation recorded numerous transactions in an account labeled Intangibles as follows:

Jan. 2	Incorporation fees	\$17,500
Jan. 10	Legal fees for the organization of the company	7,500
Jan. 25	Paid for large-scale advertising campaign for the year	15,000
Apr. 1	Acquired land for \$15,000 and a building for \$20,000 to house the R&D activities. The building has a 20-year life.	35,000
May 15	Purchased materials exclusively for use in R&D activities. Of these materials, 20% are left at the end of the year and will be used in the same project next year. (They have no alternative use.)	15,000
June 30	Filed for a patent	10,000
July 1	Operating loss for first six months of the year	12,000
Dec. 11	Purchased an experimental machine from an inventor. The machine is expected to be used for a particular R&D activity for two years, after which it will have no residual value.	12,000
Dec. 31	Paid employees involved in R&D	30,000

Required

Prepare adjusting journal entries to eliminate the Intangibles account and correctly record all the items. The company amortizes patents over 10 years.

P12-4 Correcting Entries for Patents During the year-end audit of the Cressman Corporation's financial statements for 2007, you discover the following items:

1. The company had capitalized \$57,000 to the Patent account at the beginning of 2006 for the cost of a patent. This amount included \$50,000 of R&D costs. The patent was amortized over a 20-year life in 2006 and 2007.
2. At the beginning of 2006, the company had paid its lawyers \$8,000 to successfully defend a patent infringement suit regarding the patent in item 1. The company debited this cost to legal fees expense.
3. At the beginning of 2007, the company purchased a patent for \$30,000 from the Baylor Company to prevent potential competition. It recorded the cost in the Patent account and amortized this cost over the remaining legal life of the patent obtained in item 1. However, the company agreed to a suggestion by the auditors that the life of the company patent obtained in item 1 was protected for only seven more years as of the beginning of 2007.

Required

Prepare adjusting journal entries on December 31, 2007.

P12-5 Cost of Patents The Davis Research Company engaged in the following six transactions during 2007:

1. Purchased a patent for \$35,000. Legal costs of \$5,000 were also incurred.
2. Costs of improving patent:

Engineering costs	\$20,000
Assembling and testing prototypes	10,000
Other R&D costs	25,000
3. Sold a prototype machine for \$7,000. The research and development were performed in previous years.
4. Licensed a manufacturing process to another company and received \$80,000 as an advance payment.
5. Successfully defended a patent infringement suit at a cost of \$12,000.
6. Earned \$5,000 of the advance payment on the licensed manufacturing process in Item 4.

Required

Prepare journal entries to record the preceding transactions.

P12-6 AICPA Adapted Research and Development Costs Cressman Company incurred research and development costs in 2007 as follows:

Materials used in research and development projects	\$ 400,000
Equipment acquired that will have alternate future uses in future research and development projects for four years	2,000,000
Personnel costs of employees involved in research and development projects	1,000,000
Consulting fees paid to outsiders for research and development projects	100,000
Indirect costs reasonably allocable to research and development projects	200,000

Required

What is the amount of research and development costs charged to Cressman's 2007 income?

P12-7 Intangibles The Jolis Company has provided information on the following items:

1. A patent was purchased from the Totley Company for \$500,000 on January 1, 2006. At that time, Jolis estimated the remaining useful life to be 10 years. The patent was carried on Totley's books at \$20,000 when it sold the patent.
2. On March 2, 2007 a franchise was purchased from the Unal Company for \$240,000. In addition, 8% of the revenue from the franchise must be paid to Unal. Revenue earned during 2007 was \$620,000. Jolis believes that the life of the franchise is indefinite and that the franchise is not impaired at the end of 2007.
3. Research and development costs were incurred as follows: (a) materials and equipment: \$50,000; (b) personnel: \$80,000; and (c) indirect costs: \$40,000. The costs were incurred to develop a product that will go on sale in 2008 and will have an expected life of five years.
4. A tradename had been purchased for a sugar substitute at the beginning of 2003 for \$80,000. In January 2007 it was suspected that the product caused cancer and so the tradename was abandoned.
5. The company purchased the net assets of Lansing Company on September 1, 2004 for \$950,000, and the Lansing Company was liquidated. The Lansing Company had the following book (fair) values: current assets, \$200,000 (\$210,000); property, plant, equipment, \$750,000 (\$900,000), liabilities, \$250,000 (\$250,000). Any goodwill is not impaired at the end of 2007.

Required

Prepare journal entries for the Jolis Company for 2007. The company uses the straight-line method of amortization computed to the nearest month over the maximum allowable life. Assume that the company pays all costs in cash, unless otherwise indicated.

P12-8 Cost of a Copyright The Gansac Publishing Company signed a contract with an author to publish her book. The signing took place on January 1, 2007 and a payment of \$20,000 was made. The agreement was that the author would receive 10% of the selling price of \$10 per book. The company expects sales of the book to be 100,000 copies in 2007, 80,000 in 2008, and 20,000 in 2009. It incurred production costs of \$800,000 for 200,000 copies during 2007.

Required

1. Prepare journal entries to record the preceding events during 2007 and 2008, assuming that sales were as projected.
2. How would your answer change if the projected sales were considered to be "probable"?

P12-9 R&D Costs The controller of the Halpern Company prepared the following income statement and balance sheet at the end of the first year of the company's existence:

Income Statement			
	Sales revenue	\$40,000	
	Cost of sales	(20,000)	
	Operating expenses	<u>(8,000)</u>	
	Net income	<u>\$12,000</u>	

Balance Sheet			
Cash	\$ 33,000	Accounts payable	\$ 5,000
Inventory	24,000	Notes payable	40,000
R&D costs	30,000	Common stock	50,000
Property, plant, and equipment (net)	<u>20,000</u>	Retained earnings	<u>12,000</u>
	<u>\$107,000</u>		<u>\$107,000</u>

Investigation shows that R&D costs include, among others, half the year's operating costs because "the company is not yet operating at capacity." In addition R&D costs include \$5,000 of materials that were wasted during early production because "our employees made some unnecessary mistakes."

Required

1. Prepare the financial statements according to generally accepted accounting principles.
2. Compute the company's return on assets (net income divided by average total assets, as we discussed in Chapter 6.) under both the original and revised financial statements.

P12-10 Intangibles The Bailey Company was formed in January 2005 and is preparing its financial statements under GAAP for the first time at the end of 2007. Its general ledger at December 31, 2007 includes the following assets:

Patent	\$120,000
Copyright	140,000
Tradename	150,000
Computer software	90,000
Organization costs	30,000
Research and development	250,000
Intellectual capital	150,000
Goodwill	90,000

As the recently hired accountant for the company, you have been asked to make sure that the company's accounting for intangibles follows GAAP. You know that, because the company has never issued financial statements according to GAAP, any adjustments that are made to correct violations of GAAP are recorded as an adjustment to its retained earnings. You determine that the patent has an expected life of 15 years at the end of 2007 and no residual value, and that it will generate approximately equal benefits each year. You also determine that the company will use the copyright and tradename for the foreseeable future. The computer software is used in the company's 20 offices around the country; it was replaced in 40% of the offices in 2007 and will be replaced in the remaining offices next year. On further examination, you find that the company had previously capitalized the expected value of its "human resources" as intellectual capital, with a corresponding increase in additional paid-in capital.

You also determine that the tradename and goodwill arose from an acquisition of a subsidiary company at the end of 2006. Because of a significant adverse change in the market, you decide that both assets are impaired. You estimate that the fair value of the tradename is \$50,000. The subsidiary company has a book value of \$500,000, including the goodwill of \$90,000. You estimate that the subsidiary's fair value is \$300,000, of which \$250,000 is allocated to its identifiable assets and liabilities.

Required

Prepare journal entries to provide the correct information under GAAP at the end of 2007.

P12-11 Impairment Wember Company acquired a subsidiary company on December 31, 2003, and recorded the cost of the intangible assets it acquired as follows:

Patent	\$100,000
Tradename	80,000
Goodwill	150,000

The patent is being amortized by the straight-line method over an expected life of 10 years with no residual value. The trade-name was considered to have an indefinite life.

Because of continued success of the subsidiary, Wember has not considered any of the intangibles to be impaired. However, because of a recession and technological changes in the subsidiary's industry, Wember decides to review all its intangibles for impairment and record any adjustments at December 31, 2007.

Wember estimates that the fair value of the patent and copyright are \$42,000 and \$25,000, respectively. The company estimates the fair value of the tradename to be \$90,000 but decides that it now has a limited life of five years. The subsidiary company has a book value of \$700,000, including the goodwill of \$150,000. Wember estimates that the fair value of the subsidiary company is \$400,000, of which it allocates 80% to the identifiable assets and liabilities.

Required

1. Prepare journal entries for Wember Company to record the impairment of its intangible assets at December 31, 2007.
2. Prepare journal entries for Wember Company to record the amortization expense for its intangibles at December 31, 2008.

P12-12 Goodwill The Hamilton Company balance sheet on January 1, 2007 was as follows:

Cash	\$ 30,000	Current liabilities	\$ 20,000
Accounts receivable	80,000	Bonds payable	120,000
Marketable securities (short-term)	40,000	Pension liability	50,000
Inventory	100,000	Common stock	200,000
Property, plant, and equipment (net)	<u>200,000</u>	Retained earnings	<u>60,000</u>
	<u>\$450,000</u>		<u>\$450,000</u>

The Korbel Company is considering purchasing the Hamilton Company (a privately held company) and discovers the following about the Hamilton Company:

1. No allowance for uncollectibles has been established. A \$10,000 allowance is considered appropriate.
2. Marketable securities are valued at cost. The current market value is \$60,000.
3. The LIFO inventory method is used. The FIFO inventory of \$140,000 would be used if the company is acquired.
4. Land, included in property, plant, and equipment, which is recorded at its cost of \$50,000, is worth \$120,000. The remaining property, plant, and equipment is worth 10% more than its depreciated cost.
5. The company has an unrecorded trademark that is worth \$70,000.
6. The company's bonds are currently trading for \$130,000 and the common stock for \$300,000.
7. The pension liability is understated by \$40,000.

Required

1. Compute the value of the implied goodwill if the Korbel Company agrees to pay \$500,000 cash for the Hamilton Company.
2. Prepare the journal entry to record the acquisition on the books of the Korbel Company, assuming the Hamilton Company is liquidated.
3. If the Korbel Company agrees to pay only \$400,000 cash, how much is the implied goodwill?
4. If the Korbel Company pays only \$400,000 cash, prepare the journal entry to record the acquisition on its books assuming the Hamilton Company is liquidated.

P12-13 AICPA Adapted *Intangibles: Expense and Disclosure* Munn, Inc., had the following intangible account balances at December 31, 2006:

Patent	\$192,000
Accumulated amortization	(24,000)

Transactions during 2007 and other information relating to Munn's intangible assets were as follows:

1. The patent was purchased from Grey Company for \$192,000 on January 1, 2005, at which date the remaining legal life was 16 years. On January 1, 2007, Munn determined that the useful life of the patent was only eight years from the date of acquisition.
2. On January 2, 2007, in connection with the purchase of a trademark from Cody Corporation, the parties entered into a noncompetition agreement and a consulting contract. Munn paid Cody \$800,000, of which three-quarters was for the trademark and one-quarter was for Cody's agreement not to compete for a five-year period in the line of business covered by the trademark. Munn considers the life of the trademark to be indefinite. Under the consulting contract, Munn agreed to pay Cody \$50,000 annually on January 2 for five years. The first payment was made on January 2, 2007. The trademark is not impaired at the end of 2007.

Required

1. Prepare a schedule of the expenses for 2007 relating to Munn's intangible asset balances at December 31, 2006 and transactions during 2007.
2. Prepare the intangible assets section of Munn's balance sheet at December 31, 2007.

P12-14 AICPA Adapted *Intangibles: Assets and Expenses* The Barb Company has provided information on intangible assets as follows:

1. A patent was purchased from the Lou Company for \$1,500,000 on January 1, 2006. Barb estimated the remaining useful life of the patent to be 10 years. The patent was carried in Lou's accounting records at a net book value of \$1,250,000 when Lou sold it to Barb.
2. During 2007, a franchise was purchased from the Rink Company for \$500,000. In addition, 5% of revenue from the franchise must be paid to Rink. Revenue from the franchise for 2007 was \$2,000,000. Barb estimates the useful life of the franchise to be 10 years and takes a full year's amortization in the year of purchase.
3. Barb incurred research and development costs in 2007 as follows:

Materials and equipment	\$120,000
Personnel	140,000
Indirect costs	<u>60,000</u>
	<u>\$320,000</u>

Barb estimates that these costs will be recouped by December 31, 2008.

4. On January 1, 2007 Barb, based on new events that have occurred in the field, estimates that the remaining life of the patent purchased on January 1, 2006 is only five years from January 1, 2007.

Required

1. Prepare a schedule showing the intangibles section of Barb's balance sheet at December 31, 2007. Show supporting computations in good form.
2. Prepare a schedule showing the income statement effect for the year ended December 31, 2007 as a result of the previously mentioned facts. Show supporting computations in good form.

P12-15 AICPA Adapted *Comprehensive* Lee Manufacturing Corporation was incorporated on January 3, 2006. The corporation's financial statements for its first year's operations were not examined by a CPA. You have been engaged to examine the financial statements for the year ended December 31, 2007, and your examination is substantially completed. The corporation's trial balance at December 31, 2007 appears as follows:

	Debit	Credit
Cash	\$ 61,000	
Accounts receivable	92,500	
Allowance for doubtful accounts		\$ 500
Inventories	38,500	
Machinery	75,000	
Equipment	29,000	
Accumulated depreciation		10,000
Patents	85,000	
Leasehold improvements	26,000	
Prepaid expenses	10,500	
Organization costs	29,000	
Goodwill	24,000	
Licensing agreement No. 1	50,000	
Licensing agreement No. 2	49,000	
Accounts payable		147,500
Unearned revenue		12,500
Capital stock		300,000
Retained earnings, January 1, 2007	27,000	
Sales		768,500
Cost of goods sold	454,000	
Selling and general expenses	173,000	
Interest expense	3,500	
Extraordinary losses	<u>12,000</u>	
Total	<u>\$1,239,000</u>	<u>\$1,239,000</u>

The following information relates to accounts that may yet require adjustment:

1. Patents for Lee's manufacturing process were acquired January 2, 2007 at a cost of \$68,000. An additional \$17,000 was spent in December 2007 to improve machinery covered by the patents and charged to the Patents account. Depreciation on fixed assets has been properly recorded for 2007 in accordance with Lee's practice, which provides a full year's depreciation

- for property on hand June 30 and no depreciation otherwise. Lee uses the straight-line method for all depreciation and amortization and amortizes its patents over their legal life.
- On January 3, 2006 Lee purchased Licensing Agreement No. 1, which was believed to have an indefinite useful life. The balance in the Licensing Agreement No. 1 account includes its purchase price of \$48,000 and costs of \$2,000 related to the acquisition. On January 1, 2007 Lee purchased Licensing Agreement No. 2, which has a life expectancy of 10 years. The balance in the Licensing Agreement No. 2 account includes its \$48,000 purchase price and \$2,000 in acquisition costs, but it has been reduced by a credit of \$1,000 for the advance collection of 2008 revenue from the agreement. In late December 2006 an explosion caused a permanent 60% reduction in the expected revenue-producing value of Licensing Agreement No. 1, and in January 2008 a flood caused additional damage that rendered the agreement worthless.
 - The balance in the Goodwill account includes (a) \$8,000 paid December 30, 2006 for newspaper advertising for the next four years following the payment, and (b) legal costs of \$16,000 incurred for Lee's incorporation on January 3, 2006.
 - The Leasehold Improvements account includes (a) the \$15,000 cost of improvements with a total estimated useful life of 12 years, which Lee, as tenant, made to leased premises in January 2006, (b) movable assembly line equipment costing \$8,500 that was installed in the leased premises in December 2007, and (c) real estate taxes of \$2,500 paid by Lee in 2007, which under the terms of the lease should have been paid by the landlord. Lee paid its rent in full during 2007. A 10-year nonrenewable lease was signed January 3, 2006 for the leased building that Lee used in manufacturing operations.
 - The balance in the Organization Costs account includes costs incurred during the organizational period.

Required

Prepare a worksheet (spreadsheet) to adjust accounts that require adjustment and prepare financial statements. A separate account should be used for the accumulation of each type of amortization and for each prior period adjustment. Formal adjusting journal entries and financial statements are not required. No intangibles are impaired at the end of 2007. Ignore income taxes.

P12-16 AICPA Adapted Comprehensive Information concerning Tully Corporation's intangible assets is as follows:

- On January 1, 2007 Tully signed an agreement to operate as a franchisee of Rapid Copy Service, Inc., for an initial franchise fee of \$85,000. Of this amount, \$25,000 was paid when the agreement was signed, and the balance is payable in four annual payments of \$15,000 each beginning January 1, 2008. The agreement provides that the down payment is not refundable and no future services are required of the franchisor. The present value at January 2, 2007 of the four annual payments discounted at 14% (the implicit rate for a loan of this type) is \$43,700. The agreement also provides that 5% of the revenue from the franchise must be paid to the franchisor annually. Tully's revenue from the franchise for 2007 was \$900,000. Tully estimates the useful life of the franchise to be 10 years.
- Tully incurred \$78,000 of experimental and development costs in its laboratory to develop a patent, which was granted on January 2, 2007. Legal fees and other costs associated with registration of the patent totaled \$16,400. Tully estimates that the useful life of the patent will be eight years.
- A trademark was purchased from Walton Company for \$40,000 on July 1, 2004. Expenditures for successful litigation in defense of the trademark totaling \$10,000 were paid on July 1, 2007. Tully estimates that the useful life of the trademark will be 20 years from the date of acquisition.

Required

- Prepare a schedule showing the intangibles section of Tully's balance sheet at December 31, 2007. Show supporting computations in good form.
- Prepare a schedule showing all expenses resulting from the transactions that would appear on Tully's income statement for the year ended December 31, 2007. Show supporting computations in good form.

P12-17 AICPA Adapted Comprehensive Bryant Corporation was incorporated on December 1, 2006 and began operations one week later. Before closing the books for the fiscal year ended November 30, 2007, Bryant's controller prepared the following financial statements:

Balance Sheet November 30, 2007			
<i>Assets</i>		<i>Liabilities and Stockholders' Equity</i>	
Current assets		Current liabilities	
Cash	\$ 180,000	Accounts payable and accrued expenses	\$ 592,000
Accounts receivable	480,000	Income taxes payable	168,000
Less: Allowance for doubtful accounts	(59,000)	Total current liabilities	<u>\$ 760,000</u>
Inventories	430,000	Stockholders' equity	
Prepaid insurance	15,000	Common stock, \$10 par value	\$ 400,000
Total current assets	<u>\$1,046,000</u>	Retained earnings	<u>392,000</u>
Property, plant, and equipment	426,000	Total stockholders' equity	<u>\$ 792,000</u>
Less: Accumulated depreciation	(40,000)	Total Liabilities and Stockholders' Equity	<u><u>\$1,552,000</u></u>
Research and development costs	120,000		
Total Assets	<u><u>\$1,552,000</u></u>		

Statement of Income
For Year Ended November 30, 2007

Net sales	\$2,950,000
Operating expenses	
Cost of sales	\$1,670,000
Selling and administrative	650,000
Depreciation	40,000
Research and development	30,000
Total expenses	\$2,390,000
Income before income taxes	\$ 560,000
Income tax expense	168,000
Net Income	\$ 392,000

Bryant Corporation is in the process of negotiating a loan for expansion purposes, and the bank has requested audited financial statements. During the course of the audit, the following additional information was obtained:

1. Included in selling and administrative expenses were \$5,000 of costs incurred on software being developed for sale to others. The technological feasibility of the software has been established.
2. Based on an aging of the accounts receivable as of November 30, 2007, it was estimated that \$36,000 of the receivables will be uncollectible.
3. Inventories at November 30, 2007 did not include work-in-process inventory costing \$12,000 sent to an outside processor on November 26, 2007.
4. A \$3,000 insurance premium paid on November 30, 2007 on a policy expiring one year later was charged to insurance expense.
5. Bryant adopted a pension plan on June 1, 2007 for eligible employees to be administered by a trustee. Based upon actuarial computations, the first 12 month's accrued pension plan expense was estimated at \$45,000.
6. On June 1, 2007 a production machine purchased for \$24,000 was charged to repairs and maintenance. Bryant depreciates machines of this type on the straight-line method over a five-year life, with no salvage value, for financial and tax purposes.
7. Research and development costs of \$150,000 were incurred in the development of a patent that Bryant expects to be granted during the fiscal year ending November 30, 2008. Bryant initiated a five-year amortization of the \$150,000 total cost during the fiscal year ended November 30, 2007.
8. During December 2007 a competitor company filed suit against Bryant for patent infringement claiming \$200,000 in damages. Bryant's legal counsel believes that an unfavorable outcome is probable. A reasonable accrual based on an estimate of the court's award to the plaintiff is \$50,000.
9. The 30% effective tax rate was determined to be appropriate for calculating the provision for income taxes for the fiscal year ended November 30, 2007. Ignore computation of deferred portion of income taxes.

Required

1. Prepare the necessary correcting entries.
2. Prepare a corrected balance sheet of Bryant Corporation as of November 30, 2007 and a corrected statement of income for the year ended November 30, 2007.

P12-18 Goodwill The Elm Company is considering purchasing the EKC Company. The balance sheet of the EKC Company at December 31, 2007 is as follows:

Cash	\$ 50,000	Current liabilities	\$ 60,000
Accounts receivable	70,000	Bonds payable	200,000
Inventory	120,000	Common stock	300,000
Property, plant, and equipment (net)	600,000	Retained earnings	280,000
	\$840,000		\$840,000

At December 31, 2007 the Elm Company discovered the following about the EKC Company:

1. No allowance for uncollectible accounts has been established. An allowance of \$5,000 is considered appropriate.
2. The LIFO inventory method has been used. The FIFO inventory method would be used if EKC were purchased by Elm. The FIFO inventory valuation of the December 31, 2007 ending inventory would be \$180,000.
3. The fair value of the property, plant, and equipment (net) is \$730,000.
4. The company has an unrecorded patent that is worth \$120,000.
5. The book values of the current liabilities and bonds payable are the same as their market values.

Required

Compute the value of the goodwill if the Elm Company pays \$1,350,000 for EKC.

CASES

COMMUNICATION

C12-1 Patents

AICPA Adapted In examining the books of Samson Manufacturing Company, you find on the December 31, 2007 balance sheet the item, “Costs of patents, \$308,440.” Referring to the ledger accounts, you note the following items regarding one patent acquired in 2004:

2004	Legal costs incurred in defending the validity of the patent	\$3,500
2006	Legal costs in prosecuting an infringement suit	7,900
2006	Legal costs (additional expenses) in the infringement suit	1,500
2006	Cost of improvements (unpatented) on the patented device	4,800

There are no credits in the account, and the company has not recorded any amortization for any of the patents. There are three other patents issued in 2001, 2003, and 2004; all were developed by the staff of the client. The patented articles are presently very marketable, but are estimated to be in demand only for the next few years.

Required

Discuss the items included in the Patent account from an accounting standpoint.

C12-2 Patent and R&D

AICPA Adapted Clonal, Inc., a biotechnology company, developed and patented a diagnostic product called Trouver. Clonal purchased some research equipment to be used exclusively for Trouver and other research equipment to be used on Trouver and subsequent research projects. Clonal defeated a legal challenge to its Trouver patent and began production and marketing operations for the product.

Clonal allocated its corporate headquarters’ costs to its research division as a percentage of the division’s salaries.

Required

- Explain how Clonal should report the equipment purchased for Trouver in its income statements and balance sheets.
- Describe the matching principle.
 - Describe the accounting treatment of research and development costs and consider whether this is consistent with the matching principle. What is the justification for the accounting treatment of research and development costs?
- Explain how Clonal should classify its corporate headquarters’ costs allocated to the research division in its income statement.
- Explain how Clonal should report the legal costs incurred in defending Trouver’s patent in its statement of cash flows.

C12-3 Research and Development Costs

AICPA Adapted The Gratwick Company is in the process of developing a revolutionary new product. A new division of the company was formed to develop, manufacture, and market this new product. As of year-end (December 31, 2006), the new product has not been manufactured for resale; however, a prototype unit was built and is in operation.

Throughout 2007 the new division incurred certain costs. These costs include design and engineering studies, prototype manufacturing costs, administrative expenses (including salaries of administrative personnel), and market research costs. In addition, the company purchased approximately \$500,000 in equipment (estimated useful life, 10 years) for use in developing and manufacturing the new product. The company built approximately \$200,000 of this equipment specifically for the design and development of the new product; it used the remaining \$300,000 of equipment to manufacture the preproduction prototype and will use it to manufacture the new product once it is in commercial production.

Required

- What is the definition of *research* and of *development* as defined in *FASB Statement No. 2*?
- Briefly indicate the practical and conceptual reasons for the conclusion reached by the FASB on accounting practices for research and development costs.
- In accordance with *FASB Statement No. 2*, how should Gratwick record the various costs in the financial statements for the year ended December 31, 2007?

C12-4 Goodwill

AICPA Adapted After extended negotiations, Rothman Corporation bought from Felzar Company most of the latter’s assets on June 30, 2007. At the time of the sale, Felzar’s accounts (adjusted to June 30, 2007) reflected the following descriptions and amounts for the assets transferred:

	Cost	Contra (Valuation) Account	Book Value
Receivables	\$ 83,600	\$ 3,000	\$ 80,600
Inventory	107,000	5,200	101,800
Land	20,000	—	20,000
Buildings	207,500	73,000	134,500
Fixtures and equipment	205,000	41,700	163,300
Goodwill	50,000	—	50,000
	<u>\$673,100</u>	<u>\$122,900</u>	<u>\$550,200</u>

You ascertain that the contra (valuation) accounts were allowance for doubtful accounts, allowance to reduce inventory to market, and accumulated depreciation. During the extended negotiations, Felzar held out for a consideration of approximately \$600,000 (depending on the level of the receivables and inventory). As of June 30, 2007, however, Felzar agreed to accept Rothman's offer of \$450,000 cash plus 1% of the net sales (as defined in the contract) of the next five years, with payments at the end of each year. Felzar expects that Rothman's total net sales during this period will exceed \$15 million.

Required

1. Explain how Rothman Corporation should record this transaction.
2. Discuss the propriety of recording goodwill in the accounts of Rothman Corporation for this transaction.

C12-5 Goodwill

AICPA Adapted Elson Corporation, a retail fuel oil distributor, has increased its annual sales volume to a

level three times greater than the annual sales of a dealer it purchased in 2003 in order to begin operations.

The board of directors recently received an offer to negotiate the sale of Elson Corporation to a large competitor. As a result, the majority of the board wants to increase the stated value of goodwill on the balance sheet to reflect the larger sales volume developed through intensive promotion and the current market price of sales gallonage. A few of the board members, however, would prefer to eliminate goodwill altogether from the balance sheet in order to prevent "possible misinterpretations." Goodwill was recorded properly in 2003.

Required

1. Explain the meaning of the term *goodwill*.
2. Explain why the book and fair values of the goodwill of Elson Corporation are different.
3. Discuss the propriety of (a) increasing the stated value of goodwill prior to the negotiations and (b) eliminating goodwill completely from the balance sheet prior to negotiations.

CREATIVE AND CRITICAL THINKING

C12-6 Intangibles

Some intangibles that companies may report on their balance sheets include patents, copyrights, tradenames, computer software, and goodwill.

Required

1. Which of these intangibles would typically be amortized? How would they be amortized? Which of these intangibles would typically not be amortized? Why would they not be amortized? Which of these intangibles would never be amortized?
2. Which of these intangibles must be reviewed for impairment annually?

C12-7 Nature of Intangibles

AICPA Adapted The Johnson Company operates several plants at which it processes limestone into quicklime and hydrated lime. The Bland Plant, where most of the equipment was installed many years ago, continually deposits a dusty white substance over the surrounding countryside. Citing the unsanitary condition of the neighboring community of Adeltown, the pollution of the Adel River, and the high incidence of lung disease among workers at Bland, the state's Pollution Control Agency has ordered the installation of air pollution control equipment. Also, the Agency has assessed a substantial penalty, which will be used to clean up Adeltown. After considering the costs involved (which could not have been reasonably estimated prior to the Agency's action), Johnson decides to comply with the Agency's orders, the alternative being to cease operations at Bland at the end of the current fiscal year. The officers of Johnson agree that the air pollution control equipment should be capitalized and depreciated over its useful life, but they disagree over the period(s) to which the penalty should be expensed.

Required

Explain the conceptual merits and reporting requirements of accounting for the penalty as a

1. Charge to the current period
2. Correction of prior periods
3. Capitalizable item to be amortized over future periods

C12-8 Patents

AICPA Adapted On June 30, 2007 your client, Sprague Corporation, was granted two patents covering plastic cartons that it has been producing and marketing profitably for the past three years. One patent covers the manufacturing process and the other covers the related products.

Sprague executives tell you that these patents represent the most significant breakthrough in the industry in the past 30 years. The products have been marketed under the registered trademarks Safetainer, Duratainer, and Sealrite. Your client has already granted licenses under the patents to other manufacturers in the United States and abroad and they are producing substantial royalties.

On July 1 Sprague commenced patent infringement actions against several companies whose names you recognize as those of substantial and prominent competitors. Sprague management is optimistic that these suits will result in a permanent injunction against the manufacture and sale of the infringing products and collection of damages for loss of profits caused by the alleged infringement. The financial vice-president has suggested that the patents be recorded at the discounted value of expected net royalty receipts.

Required

1. Explain the meaning of *discounted value of expected net receipts*.
2. How would such a value be calculated for net royalty receipts?

3. Explain the basis of valuation of Sprague's patents that would be generally accepted in accounting.
4. Assuming no practical problems of implementation and ignoring generally accepted accounting principles, explain the preferable basis of valuation for patents.
5. Explain what would be the preferable theoretical basis of amortization.
6. Explain what recognition, if any, the company should make of the infringement litigation in the financial statements for the year ending September 30, 2007.

C12-9 Cost of Intangibles

AICPA Adapted After securing lease commitments from several major stores, Silver Springs Shopping Center, Inc., was organized and built a shopping center in a growing suburb. The shopping center would have opened on schedule on January 2, 2008 if it had not been struck by a severe tornado in December; it opened for business on October 2, 2008. All the additional construction costs incurred as a result of the tornado were covered by insurance.

In July 2007 in anticipation of the scheduled January opening, a permanent staff was hired to promote the shopping center, obtain tenants for the uncommitted space, and manage the property. A summary of some of the costs incurred in 2007 and the first nine months of 2008 follows:

	2007	Jan. 1, to Sept. 30, 2008
Interest on mortgage bonds	\$60,000	\$90,000
Cost of obtaining tenants	28,000	58,000
Promotional advertising	34,000	34,000

The promotional advertising campaign was designed to familiarize shoppers with the center. Had the company known in time that the center would not open until October 2008, it would not have made the 2007 expenditure for promotional advertising. The company had to repeat the advertising in 2008.

All the tenants who had leased space in the shopping center at the time of the tornado accepted the October occupancy date on condition that the monthly rental charges for the first nine months of 2008 be canceled.

Required

Explain how the company should treat each of the costs for 2007 and the first nine months of 2008. Give the reasons for each treatment.

C12-10 Analyzing Coca-Cola's Intangibles Disclosures

Refer to the financial statements and related notes of the Coca-Cola Company in Appendix A of this book.

Required

1. What was the total amount of intangible assets that the company reported at the end of 2004, and what was the amount of each component?
2. Do you think that the company has additional "intangibles" that are not recorded on the balance sheet? Why? How would this issue affect your understanding of the company's financial performance?
3. Re-create summary journal entries to record the transactions and events that affected the "amortized intangible assets" in 2004, assuming there were no sales.
4. Compute the estimated average life of the "amortized intangible assets."
5. Why does the company amortize some of its intangible assets but not others?



C12-11 Ethics and Intangibles

You are auditing the financial records of a company and you are aware that it has grown quickly in the last few years by acquiring other companies. You look up the disclosure in last year's annual report, which states, "The company amortizes its intangibles over periods ranging from 3 to 15 years." As you review the company's records, you find that the company made an acquisition of a "high-tech" company three years ago and has not recognized any impairment on the related goodwill. In the last six years, the company has made five other acquisitions and has not recognized any impairment related to them. Included in the acquisitions are several patents that are amortized over nine years and some intangibles with indefinite lives.

Required

From financial reporting and ethical perspectives, discuss the issues raised by this situation.