A LITTLE BACKGROUND

Before “corporate scandal” was the number one focus, intangible asset valuation, and amortization periods were among the most scrutinized aspects of financial reporting. AND STILL ARE VERY HIGH PRIORITIES

Intangible assets represent nearly 50% of the balance sheet these days.

Prior to FAS 142, goodwill was amortized. Now it, and intangibles with “indefinite useful lives” are no longer amortized. Can you say “ticking time bomb”? Also, how about our old friend the matching principle- where did it go?

NOT amortizing goodwill is one of the very first examples of “Convergence”.

Intangibles Defined

Assets (not including financial assets) that lack physical substance.

Valuation

Purchased Intangibles --
- At cost, which includes ...
  all expenditures necessary to make asset ready for its intended use.

Internally-Created Intangibles --
- Generally expensed as incurred.

Amortization --
- Limited useful life – AMORTIZE, over estimated life
  - Test for impairment under same rules as fixed assets...
    - Remember? If “event or change in circumstance” then do the undiscounted cash flow analysis.
  - Indefinite useful life – No AMORTIZATION, BUT annual impairment testing required... no “if” - ALWAYS ONCE/YEAR
Amortization

Limited-Life Intangibles --
The useful life should reflect the periods over which these assets will contribute to cash flows (MATCHING)

Indefinite-Life Intangibles—
There is no foreseeable limit on the period of time over which the intangible asset is expected to provide cash flows.

- Test for impairment at least annually-
  - FIRST compare estimated fair value of business to NBV, if FV>NBV, done, if not...
  - Write Goodwill down until FV of the business= its NBV

IMPAIRMENT TESTING DISCUSSED MORE LATER

Types of Intangibles

Trademark or Trade Name-
- Registration with the U.S. Patent and Trademark Office provides legal protection for an indefinite number of renewals of periods of 10 years each.

NO- Indefinite life- test for impairment annually (more on impairment testing later)

- Direct costs capitalizable (i.e attorney fees)

Customer Lists

- Capitalizable if you bought it, if internally generated, nope.

Types of Intangibles- Continued

Copyright
- Granted for the life of the creator plus 70 years.

Franchise, License, and Permits

Patent
- right to use, manufacture, and sell a product or process for a period of 20 years.

Goodwill- we will discuss at length!

NOT AN INTANGIBLE

- Costs to internally develop an intangible
- Organizational costs (SOP 98-5)
- Unless ACQUIRED, these are NOT capitalized as intangibles (expense as incur)
  - Customer mailing lists;
  - Brand name;
  - Just about anything which is not tangible and not acquired
1. Alatorre purchased a patent from Vania Co. for $1,000,000 on January 1, 2005. The patent is being amortized over its remaining legal life of 10 years, expiring on January 1, 2015. During 2007, Alatorre determined that the economic benefits of the patent would not last longer than 6 years from the date of acquisition. What amount should be reported in the balance sheet for the patent, net of accumulated amortization, at December 31, 2007?

2. Alatorre bought a franchise from Alexander Co. on January 1, 2006, for $400,000. Its carrying amount on Alexander's books at January 1, 2006, was $500,000. The franchise had an estimated useful life of 30 years. Because Alatorre must enter a competitive bidding at the end of 2015, it is unlikely that the franchise will be retained beyond 2015. What amount should be amortized for the year ended December 31, 2007?
Exercise 12-4

3.
**On January 1, 2007, Alatorre incurred organization costs of $275,000. What amount should be expensed in 2007?**

All of it!!!
<table>
<thead>
<tr>
<th>ASSETS</th>
<th>Cost</th>
<th>FMV</th>
<th>Inc.(Dec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>15,000</td>
<td>15,000</td>
<td>-</td>
</tr>
<tr>
<td>Receivables</td>
<td>10,000</td>
<td>10,000</td>
<td>-</td>
</tr>
<tr>
<td>Inventories</td>
<td>50,000</td>
<td>70,000</td>
<td>20,000</td>
</tr>
<tr>
<td>PP&amp;E</td>
<td>80,000</td>
<td>130,000</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>155,000</strong></td>
<td><strong>225,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUITIES</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current liabilities</td>
<td>25,000</td>
<td>25,000</td>
<td>-</td>
</tr>
<tr>
<td>Capital stock</td>
<td>100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained earning</td>
<td>30,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total equities</strong></td>
<td><strong>155,000</strong></td>
<td><strong>25,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Net Assets: 200,000
Is there any Goodwill?

- **Book Value**: $130,000
- **Fair Value**: $200,000
- **Purchase Price**: $300,000

Revaluation

- **Revaluation**: $70,000

**Goodwill**: $100,000

**JOURNAL ENTRY:**

- **Cash**: 15,000
- **A/R**: 10,000
- **Inventory**: 70,000
- **PP&E**: 130,000
- **Current Liab.**: 25,000
- **Cash**: 300,000
- **Goodwill**: 100,000
WHAT IF?

- In prior example, what if the acquired company had developed a mailing list that we got. Because it was internally generated, the seller has no asset.

- Does this asset have a value even if not on seller’s books?

  OF COURSE

- If we acquire it, can we record that asset?

  YES

- Would this impact your goodwill?

  Goodwill recorded would be impacted by the amount of the capitalized intangible.

JOURNAL ENTRY (if mailing list was valued at $25,000):

Cash 15,000
A/R 10,000
Inventory 70,000
PP&E 130,000
Intang. 25,000
Current liab. 25,000
Cash 300,000
Goodwill 75,000

GOODWILL IS A PLUG:
THE MORE THE IDENTIFIABLE ASSETS,
THE LESS THE GOODWILL

Negative Goodwill

When FMV of the acquired assets is higher than the purchase price.

FASB requires that this remaining excess be recognized as an gain.

NOTE: NOT AN EXTRAORDINARY GAIN=
RECENT CHANGE IN GAAP.

IMPAIRMENT TESTING

Indefinite Life Intangibles, EXCLUDING GOODWILL-

- REMEMBER these do not get amortized

  - Annually estimate fair-market value and adjust if carrying value is greater than fair value

Definite Life Intangibles-

- These do get amortized, and therefore it is assumed that they ratably decline in value on the balance sheet, matching their Value, so...

  - Only test for impairment if there has been an event or change in circumstance indicating that an impairment may have occurred:

    - Test One: Event or change in circumstance? If not, done;
    - Test Two: Undiscounted cash flows. If pass, done;
    - Impairment: Measured as the excess of carrying value over Fair Value.
Definite-Life Intangible Impairment

Trademark with 5 years remaining has been amortized to $200,000. There has been an advancement in a competitor's trademark which is deemed an "event or change in circumstances" which may impair our trademark. We have estimated the future cash flows as follows:

<table>
<thead>
<tr>
<th>Total</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>175,000</td>
<td>100,000</td>
<td>50,000</td>
<td>10,000</td>
<td>10,000</td>
<td>5,000</td>
</tr>
</tbody>
</table>

Because the undiscounted cash flows of $175,000 is less than the NBV of $200,000, there has been an impairment. We have estimated the fair value of our trademark. Most likely we will just DISCOUNT the cash flows. Using a rate of 8%, they are:

<table>
<thead>
<tr>
<th>Total</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>160,198</td>
<td>96,225</td>
<td>44,549</td>
<td>8,250</td>
<td>7,639</td>
<td>3,536</td>
</tr>
</tbody>
</table>

Therefore our estimated impairment is:

Estimated fair value 160,198
Less NBV 200,000
Impairment 39,802

ENTRY:

Impairment (or amortization) expense 39,802
Accum. Amortization 39,802

IMPAIRMENT TEST: GOODWILL

It is a two-step process:

Step 1: Estimate the fair value of the reporting unit in which the goodwill is recorded. Excess of the reporting units value over its NBV (including goodwill) indicates no impairment. If FV>NBV, done. BUT if not, then:

Step 2: Estimate the "implied fair value of goodwill" by comparing the fair value of the reporting unit to the FAIR VALUE OF THE NET ASSETS (excluding goodwill) - INCLUDING ANY INT. Adjust goodwill to its implied fair value.

IMPORTANT NOTE: Not in scope of class, but always fix any other impairments in a reporting unit before revaluing goodwill.

Goodwill Impairment Example

NOT the same as the textbook example (similar):

<table>
<thead>
<tr>
<th>Name</th>
<th>NBV</th>
<th>F. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>200,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Receivables</td>
<td>300,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>700,000</td>
<td>750,000</td>
</tr>
<tr>
<td>PP&amp;E, Net</td>
<td>800,000</td>
<td>810,000</td>
</tr>
<tr>
<td>Goodwill</td>
<td>900,000</td>
<td>??</td>
</tr>
<tr>
<td>Less: all liab. (500,000)</td>
<td>(500,000)</td>
<td></td>
</tr>
<tr>
<td>Net assets of reporting unit</td>
<td>2,400,000</td>
<td>1,560,000</td>
</tr>
</tbody>
</table>

STEP 1: Compare to fair value of reporting unit.
If fair value of the reporting unit is $2.8 million, step one passed and we are done.
BUT if the fair value of the reporting unit is $1.9 million, we have a problem and have STEP 2: Compute "implied fair value of goodwill"
Reporting unit value 1,900,000
Fair value of reporting unit net assets, excluding g. w 1,560,000
Implied fair value of goodwill 340,000

COMPUTE IMPAIRMENT:

Goodwill on books 900,000
Implied fair value (340,000)
Goodwill 560,000

ENTRY:

Impairment expense 560,000
Goodwill 560,000

Indefinite life intangible test

Estimate fair value annually and adjust DOWNWARD ONLY if there is an impairment.

Pretty simple: B/C we don't have to estimate the fair value in this class!!!
Research and Development

**Research Activities:**
Planned search or critical investigation aimed at discovery of new knowledge.

**Examples:**
Laboratory research aimed at discovery of new knowledge; searching for applications of new research findings.

---

**Cost Associated with R & D**
ARE GENERALLY EXPENSED AS INCURRED
1 - Materials, equipment, and facilities
2 - Personnel
3 - Purchased R&D, unless has value to future R&D, then capitalize and expense with that future R&D
4 - Contract services
5 - Indirect costs

---

**Research and Development**

**Development Activities:**
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.

**Examples:**
Conceptual formulation and design of possible product or process alternatives; construction of prototypes and operation of pilot plants.

R & D excludes expenditures for:
- Legal work, routine improvements, or periodic retooling.
- Research related to selling and administrative activities.
Exercise

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Investment in a subsidiary company</td>
<td>Long-term investments</td>
</tr>
<tr>
<td>2. Timberland</td>
<td>PP &amp; E</td>
</tr>
<tr>
<td>3. Cost of engineering activity required to advance the design of a product to the manufacturing stage.</td>
<td>R &amp; D expense</td>
</tr>
<tr>
<td>4. Lease prepayment</td>
<td>Prepaid rent</td>
</tr>
<tr>
<td>5. Cost of equipment obtained under a capital lease.</td>
<td>PP &amp; E</td>
</tr>
<tr>
<td>6. Cost of searching for applications of new research findings.</td>
<td>R &amp; D expense</td>
</tr>
<tr>
<td>7. Cost incurred in the formation of a corporation.</td>
<td>Expense</td>
</tr>
</tbody>
</table>

Exercise

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Operating losses incurred in the start-up of a business.</td>
<td>Operating losses</td>
</tr>
<tr>
<td>9. Training costs incurred in start-up of new operation.</td>
<td>Expense</td>
</tr>
<tr>
<td>10. Purchase cost of a franchise.</td>
<td>Intangible</td>
</tr>
<tr>
<td>11. Goodwill generated internally.</td>
<td>Not recorded/ expensed</td>
</tr>
<tr>
<td>12. Cost of testing in search of product alternatives.</td>
<td>R &amp; D expense</td>
</tr>
<tr>
<td>13. Goodwill acquired in the purchase of a business.</td>
<td>Intangible</td>
</tr>
<tr>
<td>14. Cost of developing a patent.</td>
<td>R &amp; D expense</td>
</tr>
</tbody>
</table>

Exercise

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Cost of purchasing a patent from an inventor.</td>
<td>Intangible</td>
</tr>
<tr>
<td>16. Legal costs incurred in securing a patent.</td>
<td>Intangible</td>
</tr>
<tr>
<td>17. Unrecovered costs of a successful legal suit to protect the patent.</td>
<td>Intangible</td>
</tr>
<tr>
<td>18. Cost of conceptual formulation of possible product alternatives.</td>
<td>R &amp; D expense</td>
</tr>
<tr>
<td>19. Cost of purchasing a copyright.</td>
<td>Intangible</td>
</tr>
<tr>
<td>20. Research and development costs.</td>
<td>R &amp; D expense</td>
</tr>
<tr>
<td>21. Cost of developing a trademark.</td>
<td>Expensed</td>
</tr>
<tr>
<td>22. Cost of purchasing a trademark.</td>
<td>Intangible</td>
</tr>
</tbody>
</table>

Josha Company incurred the following costs during 2001:

- Quality control during commercial production, including routine testing of products: $58,000 | R&D |
- Laboratory research aimed at discovery of new knowledge: $68,000 | 68,000 |
- Engineering follow-through in an early phase of commercial production: $15,000 | 0 |
- Adaptation of an existing capability to a particular requirement or customer's need as part of continuing commercial production: $13,000 | 0 |
- Trouble-shooting in connection with breakdowns during commercial production: $29,000 | 0 |
- Searching for applications of new research findings: $19,000 | 19,000 |

Compute research and development costs for 2001: $87,000
Exercise

More Company incurred the following costs during 2001:

- Cost of equipment acquired that will have alternative uses in future R&D projects over the next 5 years: $280,000
- Materials consumed in R&D projects: 59,000
- Consulting fees paid to outsiders for R&D projects: 100,000
- Personnel costs of persons involved in R&D projects: 128,000
- Indirect costs reasonably allocable to R&D projects: 50,000
- Materials purchased for future R&D projects: 34,000

Compute research and development costs for 2001.

$280,000 / 5 = $56,000
59,000
100,000
128,000
50,000
34,000

$393,000

Other concepts

Advertising: Generally expense as incurred unless you can establish that the benefit has not yet occurred (generating a prepaid expense)