Depreciation and Financial Statements



Depreciation & Amortization

The Internal Revenue Service (IRS) requires the value of an asset (tangible and intangible) to be spread out over its useful life; Depreciation.

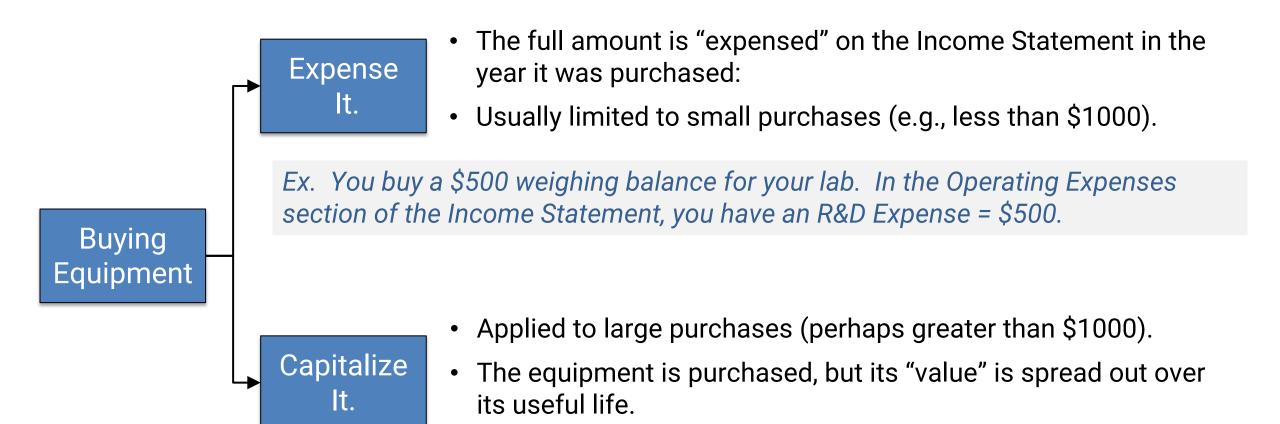
While the company pays for an asset up front, its value ("Book Value") is recorded over the life of the asset, in a way prescribed by the IRS.

Depreciation and Amortization are "non-cash" expenses... strictly used for accounting and tax purposes.

The decreasing value of the asset is accounted for in the Balance Sheet.

The amount it decreases is accounted for on the Income Statement.

Expensing vs. Capitalizing Equipment



Ex. You buy a \$150,000 microscope for your lab. In the Operating Expenses section of the Income Statement, you have a portion of the full amount as a "Depreciation" expense, e.g., \$25,000.

• Each year a *portion* of its value is expensed in as Depreciation.

Depreciation and the Income Statement

A \$500 laboratory balance, expensed in the year it was purchased (2022).

	2022
Revenues	\$1,000,000
COGS	\$600,000
Gross Profit:	\$400,000
Operating Expenses	
R&D	\$30,000
Sales, General &Admin	\$170,000
Depreciation	\$25,000
Amortization	\$5,000
Total Operating Expenses	\$230,000
Income Before Taxes	\$170,000
Income Tax (@ 21%)	\$35,700
Net Income (PAT)	\$134,300

The full \$500 would show up here in the R&D expense.

\$25,000 (\$150,000/6) would show up here in the Depreciation expense.

Where is the \$150,000 for the microscope?

A \$150,000 microscope, purchased in 2022, depreciated over 6 years.

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ASSETS

- Current Assets
 - o Cash
 - Short Term Investments
 - Accounts Receivable
 - Inventories
- Property, Plant & Equipment
 - Land
 - Buildings
 - Equipment
 - AccumulatedDepreciation

Other Assets

LIABILITIES

- Current Liabilities
 - Current Portion of Long-Term Debt
 - o Accounts Payable
 - Accrued Payroll & Other Expenses
- Long-Term Debt

SHAREHOLDER EQUITY

- Paid-In Capital
- Retained Earnings

ASSETS

LIABILITIES

SHAREHOLDER **EQUITY**

- Current[
 - Value Today = Original Cost Total Decrease in Value over Time Casl o Shor

arnings

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- Accounts Receivable
- Inventories
- Property, Plant & Equipment
 - Land
 - Buildings
 - Equipment
 - Accumulated Depreciation
- Other Assets

Accounts Payable

This represents the "historical" cost of buildings and equipment, e.g., what was originally paid for the asset.

This represents the total loss in value over time.

Accumulated Depreciation

Book Value = Cost Basis -

ASSETS

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 - o Cash
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 - Land
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 - Equipment
 - Accumulated Depreciation
- Other Assets

A \$150,000 microscope was purchased in 2022 and depreciated over 6 years.

On December 31, 2022, the Book Value of the Microscope = \$150,000

On December 31, 2023, Accumulated Depreciation = \$25,000. The Book Value of the Microscope = \$125,000

On December 31, 2024, Accumulated Depreciation = \$50,000. The Book Value of the Microscope = \$100,000

...a few years later...

On December 31, 2027, Accumulated Depreciation = \$125,000. The Book Value of the Microscope = \$25,000

On December 31, 2028, Accumulated Depreciation = \$150,000. The Book Value of the Microscope = \$0

ASSETS

- Current Assets
 - Cash
 - Short Term Investments
 - Accounts Receivable
 - Inventories
- Net Property, Plant & Equipment
 - Land
 - o Buildings
 - Equipment

Sometimes companies just show the "Net Property, Plant and Equipment, representing the <u>Book Value</u> of all its fixed assets, taking Accumulated Depreciation into account.

Net Property, Plant and Equipment = Cost Basis – Accumulated Depreciation

Other Assets

Main Takeaways...

- Depreciation is a non-cash expense, used only for accounting purposes (to determine the asset's book value) and to calculate taxes for the year.
- Purchasing an asset results in a cash outflow at the time of purchase, but its value is spread out over time.
- "Depreciation Expense" is the <u>annual</u> loss in asset value and shows up in the Income Statement.
- "Accumulated Depreciation" is the <u>total</u> loss in asset value up to some point in time, and shows up in the Balance Sheet.
- An asset's book value is its Cost Basis minus the Accumulated Depreciation.

Depreciation is a "non-cash" expense and impacts a project's cash flows. Therefore, we need to account for it in any project valuation analysis.

Next Time...

Depreciation Methods - I: SL & DB



Credits & References

Slide 1: Financial analyst analysis business financial report on digital tablet during discussion at meeting of corporate showing the results of their successful teamwork by crizzystudio, Adobe Stock (502970152.jpeg).

Slide 11: Stacked US quarter coins on wooden table, by DoubletreeStudio, Adobe Stock (228508883.jpeg).