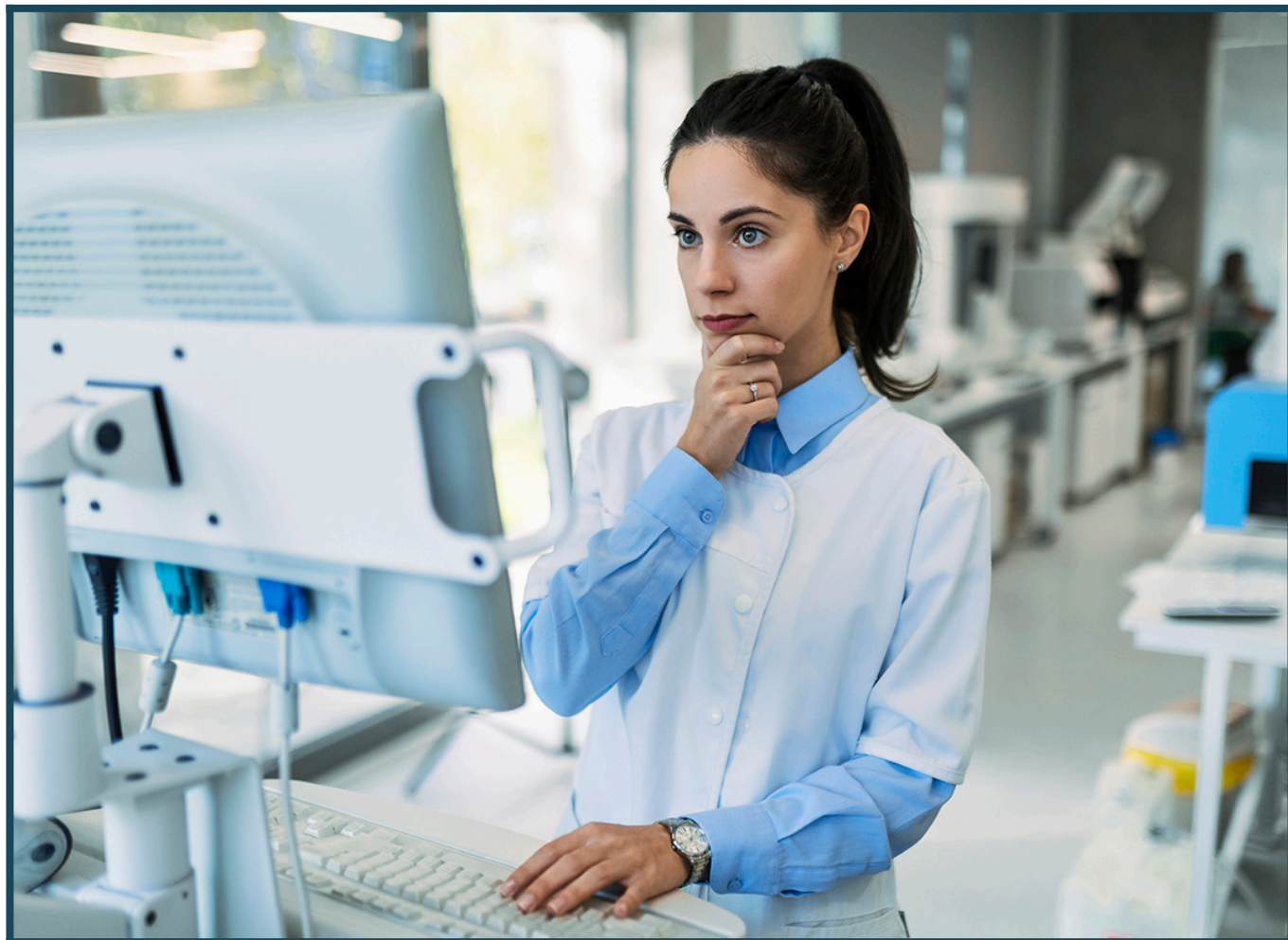


Buy or Lease: Seven Things to Consider When You Need a New Instrument

by Glenn S. Demby | August 1, 2023



Whether you're an established lab operation, startup, or somewhere in between, you face the challenge of acquiring the instrumentation you need without exceeding your budget or disrupting cash flow. Is it better to buy that equipment or lease it? The answer varies by circumstance—but what doesn't change is the need for a sound approach to the decision. "Typically, labs simply determine a dollar amount premium they'll pay to lease equipment and compare it to the dollar value of the tax and other anticipated benefits from buying," notes veteran lab cycle support services consultant Ted Palashis, president of Overbrook Support Services. The problem with this approach is that it overlooks or improperly values critical variables that affect the true cost of lab equipment. The all-too-frequent result is that labs may buy or lease equipment without a complete picture of the factors affecting their decision.

The Asset Integration Assessment (AIA) Framework

Totting up perceived dollar costs and applying simple formulas like asset cost divided by number of samples doesn't necessarily yield an asset's "real" value, cautions Palashis, especially when dealing with expensive instruments costing hundreds of thousands of dollars. According to Palashis, an AIA

framework is a superior measure of true cost because it considers all factors affecting the lab equipment's value and optimal deployment that a superficial dollar cost analysis may overlook, including:

- the lab's strategic business plans
- lab expense thresholds
- method development costs
- staff training
- existing and adoptive technology platform integration requirements
- standardization
- technology status
- clinical acceptability
- competitive positioning
- operations and maintenance

AIA not only identifies the variables necessary to make a sound decision between leasing and buying, says Palashis, but also enables the optimal deployment of potential value while avoiding the risks of being left behind or holding on to a technically inferior installed base of instrumentation. Here are seven fundamental variables that can be affected by a proper AIA cost analysis:

1. What You'll Get for Your Money

Buy: The most compelling reason to purchase outright is to have full ownership over the equipment. Ownership allows you to customize the equipment as you see fit. If your business and servicing needs change, you can sell or trade the equipment (assuming it's fully paid off).

Lease: There are two basic types of leases. The first is an operating lease under which you rent the equipment and make monthly payments to the owner in exchange for using it. If owning the equipment is important to your lab, you might want to consider the second kind of lease, a capital lease or rent-to-own arrangement, which transfers ownership to you at the end of the term, typically in exchange for an additional payment.

Point of clarification: Unless specified otherwise, the terms "leases" and "leasing" in this analysis refer to operating leases, whereas "purchase" may refer to either outright purchasing or capital leasing.

Weighing the Options: Palashis recommends asking, "What is the overall value strategy of the asset?" Leasing or buying used might make sense if you're simply seeking to supplement existing assays, platforms, or assets. Purchasing may be better suited to equipment designed to replace those assets or create new capabilities.

2. How Much Cash You Can Afford Up Front

Buy: Perhaps the biggest disadvantage of buying equipment is the cash payment you must make up front, including:

- the purchase price or down payment
- sales and other taxes
- other government or lender charges
- optional hardware, software, insurance, and services

Although buying used equipment can reduce up-front costs, it also offsets the tax advantages that come with new purchases, including depreciation rights, while increasing product quality and safety risks.

Lease: When you lease, you get the equipment new, but at a fraction of the up-front cash costs. Accordingly, leasing may be the preferred option when you have either cash flow problems or better uses for your cash. In the long term, the opportunities you can pursue by preserving your cash may more than offset the higher costs you'd incur to purchase. However, the total payments you'll be required to make over the life of the lease will likely exceed the price of purchasing the equipment outright.

Weighing the Options: When considering the up-front costs of purchasing high-ticket equipment, Palashis says you should remember that there are many options other than purchasing new from the manufacturer. You can also acquire equipment via manufacturer demo unit sales, auctions, direct purchase from labs that are selling off instrumentation, and purchase of "off lease" instrumentation. However, make sure you consider the reliability and "take title" condition of the asset. What looks like a great price may not be such a good deal if the setup or repair costs are greater than you anticipate.

3. What You'll Pay Per Month

Buy: Monthly payments are higher on financed purchases because you're paying for not only the entire purchase price of the equipment, but also sales taxes, interest, other finance charges, and—if applicable—license fees and personal property and other possible taxes.

Lease: Monthly lease payments are lower because you only pay for the depreciation of the equipment over the lease period, rent charges, and taxes. Consequently, you may be able to afford more expensive equipment if you lease.

Weighing the Options: Establish the limits of your monthly budget and then evaluate purchase and lease options that fall within it to see how closely each conforms to the lab's needs. If the lab can't afford a purchase that meets its needs, it may have to lease the appropriate instrument.

4. How Long and How Often You'll Use the Equipment

Buy: Procurement gets you access to state-of-the-art testing technology. But technology moves fast and the equipment you acquire today may become obsolete sooner than you expect. Think carefully before purchasing equipment that manufacturers frequently upgrade.

Lease: Leasing lab equipment reduces the risk of being stuck with an instrument that has become obsolete since you acquired it. As a result, leasing is generally better suited to equipment with a shorter life expectancy. According to a [scenario analysis](#) by our partner publication *Lab Manager*, purchasing lab equipment makes sense only if it's built to last for at least three years and you anticipate using it frequently during that time.¹

Weighing the Options: The life expectancy horizon for sophisticated analytical instrumentation can be difficult to forecast, Palashis cautions. "A proper perspective of real value is dependent not only on the relentless march of technological advancement, but also training costs, the lab's financial disposition, etc., all of which must be taken into account in decisions about instrumentation...that have a long-lasting scientific and business impact."

5. The Extent and Cost of Servicing

Buy: Consider how much and what kind of servicing and maintenance the equipment will require while in your possession. When you purchase new equipment, part of what you pay for is a manufacturer's ability to service it reliably and cost-effectively. This can be a huge advantage when you anticipate that the equipment may require frequent or costly maintenance, servicing, and repair.

Lease: Leasing tends to be more cost-effective for equipment that requires only minimal or basic servicing and no alterations or customization. Although leases come with warranties, they don't usually include contractual maintenance services that require the lessor to service and repair the equipment. Thus, labs that lease will need to pay close attention to and negotiate these provisions when servicing is expected to be an issue.

Weighing the Options: Palashis suggests that service issues may pose a greater risk when the acquired equipment is designed to add capability or replace, rather than augment or supplement, existing instrumentation. "New instrumentation...involves a learning curve and a potentially greater dependence on the supplier's ability to support the instrumentation, which adds a level of risk if the product is supported from Japan, Germany, or other offshore countries." Other factors to consider:

- length of time to get a service repair person to your facility
- availability of spare and replacement parts
- backup capacity and redundancy if the equipment is out of commission for a prolonged period
- the supplier's service record
- outside vs in-house maintenance

6. The Tax Deductions You'll Receive

Buy: Buying new equipment entitles you to significant tax benefits—namely, the right to depreciate the asset against taxable income over time in accordance with the Internal Revenue Service's (IRS) Modified Accelerate Cost Recovery System (MACRS) Asset Life table.² You may also qualify for other tax benefits offered on the purchase of medical equipment, such as the Internal Revenue Code Section 44 tax credit of 50 percent (up to \$10,250 per taxable year) toward the purchase of equipment that enables your lab to meet Americans with Disabilities Act requirements.³

Leasing: You don't get MACRS depreciation tax deductions or medical purchase tax credits when you lease lab equipment. However, if you enter into an operating lease, you're allowed to deduct the lease payments you make against your taxable income as an overhead expense. You may not deduct lease payments under a capital lease because the IRS treats these arrangements as an agreement to purchase the equipment.

7. The Non-Tax Depreciation Risks You'll Incur

Buy: Non-tax depreciation—erosion of the equipment's fair market value during the time you use it—is a cost you incur whether purchasing outright or via capital lease. However, if you take out a loan to buy the equipment, you run the risk of its value depreciating more than expected, in which case you might end up "upside down" (owing more on the loan than the equipment is worth).

Lease: You won't end up upside down if you lease the equipment because the lessor assumes the risk of unexpected depreciation.

Takeaway: The Need to Weigh the Pros and Cons

In these challenging economic times, labs must stretch every dollar they spend, particularly when procuring the testing equipment they need. Although short-term rentals may offer a cost-effective temporary solution in certain situations, the basic choice is between buying and leasing. And though many factors are involved, it often comes down to a trade-off between up-front cost and flexibility. Buying equipment requires a significant outlay of cash, which can be a hard sell for lab managers, especially if the company needs to borrow money to make the purchase. Leasing is an easier, quicker, and less expensive process—at least in the short term. It can also be structured to convey ownership later. However, you pay a long-term cost for these advantages—and, although leasing may carry less uncertainty, it is not entirely risk-free.

Bottom Line: Lab managers and financial officers need to understand and carefully weigh all the options, factors, advantages, and disadvantages, preferably in accordance with an AIA framework, to choose the lease or purchase option that makes most sense for their labs.

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