



Commercial-Grade Equipment Under the Microscope

By Kimberly A. Williams, M.S., and Robert W. Patton, Ph.D.

A case study examines the cost-effectiveness of commercial-grade fitness equipment.

What do the top-10 fitness centers in the United States have in common? They all have treadmills, elliptical cross-trainers, stationary cycles, stair steppers and selectorized equipment. Twenty-two percent of the industry recently expanded their cardiovascular areas, and 10 percent have expanded their resistance areas to make room for the increasing number of exercisers (IHRSA 2003).

It would stand to reason that, when opening up or expanding a facility, managers should purchase the most popular pieces of equipment to gain or maintain member satisfaction. However, another consideration when purchasing equipment is cost including initial purchase price, ongoing maintenance costs and terms of the warranty for equipment repairs and replacement. All of these considerations should be addressed before deciding what type and amount of exercise equipment to purchase. To help you understand how to evaluate these costs, the University of North Texas (UNT), Denton, Texas, performed a case study for its recreational sports department to evaluate which pieces of equipment are the most cost-effective. This can serve as a guide for your own cost-effectiveness analysis.

University of North Texas case study

The recreational facility at UNT has a fitness area of about 16,000 square feet. This area contains many lines of cardiovascular and weight equipment, which were all brand-new when the doors first opened in August 2003. For its case study on equipment, the retail prices of each piece of equipment and maintenance costs were factored to show how well similar pieces of equipment hold up against one another. In addition, the case study revealed what it costs to maintain each line of cardio equipment per hour of usage. Finally, the retail and maintenance costs between cardiovascular and weight equipment were compared.

Most of the fitness equipment purchased by UNT was under a one-year labor warranty, and a two-year parts warranty. As of now, the recreational sports department is spending little on maintenance, thanks to the warranty plan and in-house maintenance employees. This, however, does not reflect the maintenance history of the equipment. Even if a piece of equipment is under warranty and its maintenance expenses are covered, the equipment is still unavailable to

members. Equipment unavailability can cause member dissatisfaction and reflect poorly on the facility.

As for the direct costs of fitness equipment maintenance at UNT, several pieces from various companies have a record of going down. If the equipment had not been covered under a warranty program, how much would the labor and parts bills run? To answer this question, UNT's service provider, Fitness Services of North Texas, provided the cost of a service visit and each additional hour of service per visit, as well as quotes for all parts being replaced. These estimates were used to show how much it costs to maintain various pieces of equipment.

Cardio equipment. Cardiovascular equipment is extremely popular. The treadmill is the most popular, and also one of the most expensive to purchase and maintain. Keep in mind that the initial cost of the equipment is not the only expense. Before purchasing equipment, factor in the cost of incidental and preventative maintenance. Resistance equipment. Of all the equipment, the most cost-effective is resistance equipment. The retail and maintenance costs are substantially lower than that of cardiovascular equipment. The highest expense to maintain is the replacement of upholstery. Upholstery will crack and tear, no matter how well you maintain it. Some preventive steps can be taken to prolong its life, such as discouraging participants from stepping on and resting weights on the upholstery, and putting slip covers on as many pieces as possible. Slipcovers are cheaper and easier to replace than an entire padded cover. Additional covers can be kept on hand for immediate replacement.

Other than the replacement of upholstery, UNT has run into only a few minor problems with its weight equipment. Most of the problems are attributed to user error. One example of user error is the movement belt of the Rotary Torso, which has been replaced twice because users over-rotate at a fast pace and pinch the belt. To avoid replacing the belt a third time, a sign now hangs on the machine illustrating proper technique.

Dealer vs. manufacturer

In addition to deciding what products to purchase based on total costs, a decision must be made about which company the equipment will be purchased from. Is it a good idea to purchase from a dealer or directly from a manufacturer? UNT purchased its equipment from both dealers and manufacturers. Purchasing directly from manufacturers allowed us to buy more items for less money. When purchasing from a dealer, prices had to be marked up for the dealer to make a profit. Taking only this information, the most obvious decision is to buy directly from the manufacturer. **However, a better price does not mean a better quality of service.** A dealer can act as a spokesperson between you and the manufacturer. **If a piece is out of service or if more products need to be ordered, the dealer will call the manufacturer to get the answers or services needed.** UNT purchased its Precor and Nautilus equipment from Fit Co. Fitness, and its Cybex equipment from Hest Fitness. The rest of the equipment, such as

Life Fitness, Hammer Strength and Woodway, were purchased directly through the manufacturer.

As far as quality of service for UNT, dealers win hands-down. They have a vested interest in their companies, and rely on the patronage of their customers to keep them running. For that reason, they are customer-friendly and concerned about their satisfaction. For UNT, phone calls and emails are returned promptly — at times within minutes. When additional Precor ellipticals and Cybex Arcs were ordered, they were delivered as soon as possible with little effort on our part. Fit Co. also provided complimentary floor plans for UNT to make the rearrangement of equipment easier.

A manufacturer representative will also keep in contact with customers on a regular basis when in the process of making a large sale, such as the one at UNT. After the equipment is sold and installed, making contact with the company can be compared to the average Joe trying to make personal contact with the president of a major organization. **Purchasing equipment from dealers will cost more initially, but think of that extra money as payment for additional services and advice. If a dealer is not satisfying customers, it will lose them. To the manufacturer, one facility is a little fish in a big pond.**

Limitations of one case study

All of this said, be cautious about making generalizations from a single case study. For example, an aberration occurred in regard to maintenance costs of Woodway treadmills: **All treadmill units had a defect that resulted in their being replaced by the manufacturer. Certainly, this would affect the long-term costs of Woodway treadmills, but this implication could be extended to any product. Volume purchasing can also affect initial costs and influence the level of service a vendor might provide.** A case study only gives a thumbnail sketch of the larger picture.

Despite the limitations of a case study, it can also be concluded that cardiovascular equipment is far more expensive to both purchase and maintain when compared to strength equipment. It can also be concluded that initial costs of commercial exercise equipment are only a part of the long-term expenses associated with ownership. Maintenance is a cost consideration, whether it is accomplished by in-house staff or by outsourcing to maintenance professionals. **Repairs under warranty can reduce costs for a short period of time, but eventually must be borne by the owner. And, repairs can be made by the manufacturers or local vendors, and in this case study, the local vendors were far superior to the manufacturers in response time and quality of service.**

Again, caution should be exercised about comparisons of different manufacturers on the basis of such a limited sample.

Kimberly Williams, M.S., is fitness manager for Progressive Insurance in Austin, Texas, and Bob Patton, Ph.D., is the regents professor of kinesiology, health promotion and recreation at the University of North Texas, Denton, Texas.