

The String Machine Game-Changer Series

Installment 2 of 3

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Game-Changer: The Business Case for String Machines

String machine adoption has never been greater - and for good reason: compared to free-fall machines they are easier, more reliable and less costly to operate. In our first installment of this series we looked at the major bowling industry trends driving string machine adoption. One involved the challenges with older free-fall machines, which include difficulties in finding qualified technicians, reliability, operational costs, and delivering a great on-lane experience.

In this installment we will:

- Take a more in-depth look at the operational costs of free-fall versus string machines
- Make a strong business case for switching from older free-fall machines to strings; and
- Discuss what this means for new and existing proprietors and the game of bowling overall



Introduction

In 1946, the automatic free-fall pinspotter was the engine that enabled bowling to grow and explode in popularity. However, the situation in 2020 is much different. In fact, our studies show that older free-fall machines burden bowling-based businesses and new investors with some of their biggest operational expenses. Labor, parts and electricity costs can run between \$2.5 and \$4.5 thousand per lane per year—and as high as \$6 thousand in some cases.

Operational costs for free-fall machines can approach \$6 thousand/lane/year. String machines cost a fraction of that.

The operational costs of string machines are a fraction of that. What's more, they also cost less to purchase and install. According to a poll conducted by the publication Bowling Center Management in September 2020, proprietors chose string machines for three main reasons: personnel savings; maintenance savings; and lower up-front costs¹.

Top 3 Reasons Owners Prefer String Machines

BCM POLLED a number of operators who utilize string pinsetting machines at their centers. Here are the top three reasons they selected strings over free-fall machines:

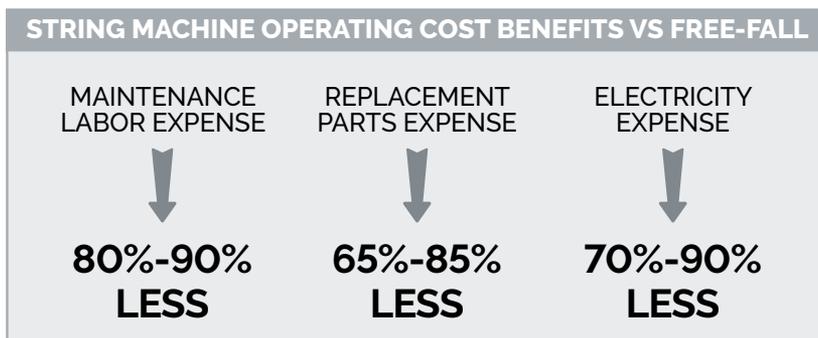
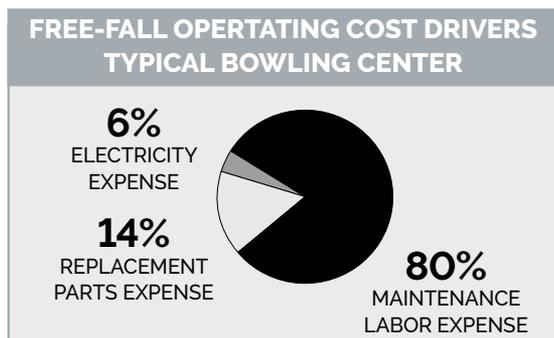
- 1. Personnel savings.** There is no need for a full-time mechanic or mechanics. Machine upkeep can be handled by an arcade game technician or someone with similar skills.
- 2. Maintenance savings.** String machines require far fewer spare parts to buy and stock.
- 3. Up-front cost.** String machines cost less than free-fall machines, making it easier to deal with lending institutions and/or purchase more machines.

¹"Strings in the Spotlight", Bowling Center Management Survey, September 2020

If you layer-on COVID-19's continuing impact, the operational cost benefits of string machines can make a bigger difference than ever to help centers reduce financial stress and recover faster post-pandemic.

Pinspotting Machine Operational Cost Drivers

The operational costs for pinspotting machines consist of five primary components: maintenance labor expense; replacement parts expense; electricity expense; working capital; and technician hiring and training expense. In all of these areas our studies show string machines prove to be significantly less – especially in ongoing maintenance, parts and electricity expenses.



Maintenance Labor Expenses

These are the labor costs needed to keep pinspotting machines running reliably and consist of:

- the labor time associated with operating and maintaining pinspotting machines; this includes time spent on routine maintenance and addressing day-to-day needs
- the labor cost of the technicians

QubicaAMF research indicates that maintenance labor expenses are by far the largest operating cost driver for a typical bowling center. However, we've found that replacing free-fall with string machines can result in an 80-90% reduction in maintenance labor expense.

Here's another labor-related benefit of switching to string machines. Centers struggling to employ qualified technicians can ease their recruitment efforts and completely eliminate pinspotting maintenance labor costs per se. Conversely, centers lucky enough to employ talented technicians can retain them and still realize significant labor cost savings. How? By reassigning them to duties that eliminate other business costs, and which add also value to the center.

Case in Point: Dover Bowl

This 22-lane center has an excellent head technician, but struggled to find and keep good help for him. Consequently, he was tied to the pinspotting machines, unable to support other areas of the business. By switching to string machines the center freed the technician to cover all aspects of facility maintenance, saving the cost of hiring outside contractors.

Replacement Parts Expenses

Addressing normal wear and tear, plus broken or damaged components, is typically the second largest operating cost driver with variances depending on:

- the type, age and overall condition of the pinspotting machines
- the robustness of the center's maintenance program; and
- the experience level of the technicians

Our research suggests that replacement parts expenses account for some 14% of total free-fall machine operational costs for a typical bowling center. Here at QubicaAMF, we typically see centers spending between \$350 and \$700 per lane per year on older free-fall machines, and as high as \$900 in some cases.

Because string machines have significantly fewer parts overall—and fewer moving parts to wear, replacement parts expenses are typically 65% to 85% less than that of free-fall machines.

Case in Point: Strike 10 Bowling and Sports Lounge

Located in Hallandale Beach, Florida, this bowling operation reported saving over \$800 per lane per year in replacement parts on average since switching to string machines.

Electricity Expense

The amount of electricity consumed by pinspotting machines can swing widely based on:

- the model
- age of the machine
- condition of the machine

Free-fall machines use more power because they often have more and bigger motors - and these motors and electronics are less efficient on older free-fall machines.

String machines consume between 70% and 90% less power than their free-fall counterparts.

Our research shows that pinspotting electrical expenses are about 6% of the total free-fall machine operational cost for a typical bowling center. These percentages can

multiply two or even three times in places like Germany, Denmark, the Netherlands and Italy as example, which pay an average of between \$0.28 and \$0.39 per kilowatt-hour compared to the U.S national average of \$0.13.

String machines consume between 70% and 90% less power than their free-fall counterparts. This not only reduces operational costs; it also serves as a more environmentally sustainable solution.

Case in Point: Tenpin Ltd.

The second largest bowling operator in the U.K., has seen an average of a 20% reduction in electricity expenses for their centers that have switched to string machines.

Working Capital Expense

This includes the amount of cash tied up in pinspotter replacement parts that are sitting on the shelf. Therefore, these funds are unavailable for the center to invest in things that could produce more meaningful returns.

A typical center with older free-fall machines tends to have between \$600-\$1 thousand per lane in spare parts inventory. As shown in the photos below, string pinspotters have far fewer parts; hence they negate keeping many

replacement parts on hand. This frees more working capital.

Case in Point: Lake Wylie Bowl N' Bounce

"I had a huge room full of spare parts tying up valuable cash," declares owner Darrin Skinner. After switching to string machines, "Now my spare parts fit on one shelf."



Typical free-fall machine spare parts inventory



Typical string machine spare parts inventory & maintenance area

Technician Hiring and Training Expense

Older free-fall machines are complex. Our research shows hiring qualified technicians can be a major expense—anywhere between \$2.5 thousand and \$4 thousand per employee, particularly for centers that struggle with high turnover. Additionally, it can take eight to 12 months to get new technicians competent with older free-fall machines like A-2 and 82-70s.

String machines can save centers thousands in technician hiring and training costs.

By comparison, even a non-technically skilled employee can be trained to comfortably operate a string machine in a matter of a few weeks or less.

Operational Cost Savings Increase Centers Profitability

Based on our experience with many string machine customers, we've seen over and over that centers switching to string realize significant operational cost savings - \$2.75 thousand to \$4 thousand per lane per year, and as high as \$5 thousand in some cases - leading to increased profitability. Customer success stories also bear this out:

With free-fall pinspotters contributing over 50% to their total maintenance costs, Lake Wylie Bowl 'N Bounce, a 16-lane center in North Carolina, added over \$45 thousand per year to bottom-line profitability by switching to string machines.

According to an article published in the December 2020 issue of International Bowling Industry magazine, Pinz, a 20-lane center in Massachusetts, improved profitability

by \$70 thousand per year after replacing free-fall with string machines—saving about \$6 thousand per month in labor, replacement parts and electrical expenses².

The Tenpin chain in the U.K., with 45 centers and over 1,100 lanes, has replaced 750 of those lanes with string machines and has seen profitability in those centers soar.

This thriving bowling operator is saving on average \$4,884 per lane per year across its string centers as a result of:

- A 22% decrease in maintenance labor expenses
- A 75% decrease in replacement parts expenses
- A 20% decrease in electricity expenses

**Centers are Seeing
Increasing Profitability
after Converting to String**

Bowl 'N Bounce
North Carolina
+ \$2.8K
per lane/per year

Pinz
Massachusetts
+ \$3.5K
per lane/per year

Tenpin
U.K.
+ \$4.8K
per lane/per year

Better Guest Experience, Happier Employees, Great for Business

Operational cost savings and increased profitability are not the only benefits string machines deliver. QubicaAMF has repeatedly seen centers switching to string machines report an increase in guest satisfaction and also happier employees. Happier guests drive repeat business and more revenue; while happier employees mean less turnover, consequently lower hiring- and training-related expenses.

Realizing social media's impact on business, consider Woodlawn Bowl in Ontario, Canada. After changing to string machines their guest experience and social scores both rose dramatically. "In the first six months our rating increased from 3.4 to 4.5 out of five stars," says owner Bob McKay.

Tenpin Ltd.'s Graham Blackwell was equally enthusiastic. "String machines have been a huge win for our guests, our employees and our business," he states after witnessing a 5% revenue increase in centers that switched to string machines. Tenpin also reported a 250% improvement in games bowled without a machine stop, plus 63% fewer guest refunds. Moreover, their employees reported being happier amid a less stressful environment, thanks to fewer pinspotting machine problems and upset guests.

Tenpin has had a 250% improvement in games bowled without a machine stop across its centers with string machines.

Woodlawn Bowl's social media review ratings increased from 3.4 to 4.5 out of 5 stars after installing string machines.

A Low-Risk Investment

Few investments are a sure bet. However, an investment in string machines is virtually a guaranteed win.

String machines lower operating costs by an amount that can be accurately measured because it is based on known quantities: operating costs for the string machine plus the center's current operating costs. This in contrast to other types of investments where returns are heavily dependent on growing the customer base and topline revenue. Both of these are hard to predict and act upon.

Because operational costs savings can often exceed loan payments on new string pinspotters, a center can essentially replace older freefall machines for free.

But the business case gets even better. Often, a center can essentially replace older free-fall with string machines for free. As David Breen, owner of Pinz, discovered, this is because the resulting monthly operational cost savings can exceed the loan on the machines².

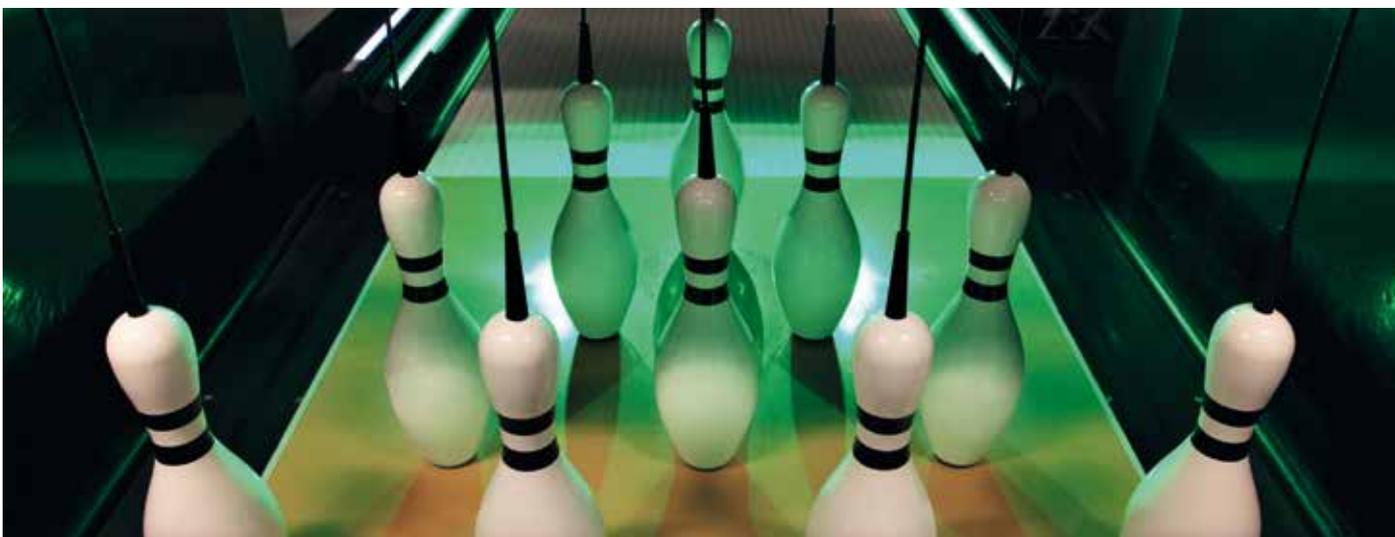
Case in Point: Pinz

Pinz replaced 20 lanes of free-fall with string and the operational cost savings is paying for the cost of the string machines².

The Business Advantage of String Machines: What It Means for the Game

The fact that string machines can make bowling centers more efficient and profitable is undeniable. What's more, because they improve pinspotter reliability they also help centers deliver a better guest experience. Spread across the industry, this contributes to healthier bowling businesses overall, ensuring a reliable, long-term attraction for sport bowling and players of all kinds.

On top of this, string machines make it easier for new investors to bring the fun and competitive challenge of bowling to new parts of the world, expanding the sport's reach and growing the game. This is because string machines are less expensive to purchase and install, easier to operate, and more environmentally friendly than free-fall machines.



¹"Strings in the Spotlight", Bowling Center Management Survey, September 2020

²Groh, Fred. "The Next Big Thing", International Bowling Industry, December 2020



Welcome, EDGE String!

Recognizing the trends and needs in the industry related to pinspotting machines, along with the opportunities to improve the string pinspotter experience, QubicaAMF introduced the EDGE String pinspotter in 2019. EDGE String provides centers an amazingly simple way to offer bowling to casual and league bowlers alike. EDGE String, the most advanced string on the market, delivers three unique and essential benefits:

- A simple and robust pinspotter any bowling staff member can operate
- An amazingly reliable and authentic experience for bowlers
- An innovative smartphone app—Tech Wizard—that makes operation even easier by proactively informing and guiding staff

Most important, since its inception, EDGE String has never faltered in its mission to provide an irrefutable business case for today's operators and new investors. As such, it can serve as a true game-changer to keep bowling relevant and profitable well into the future.

