The High Cost of Deferred Maintenance

EDGE - JULY/AUG 2005
by Jason Eastin

All arena operators must, at some time in their careers, request funds for much-needed maintenance parts, materials or service work. Asking senior management for money can become a contentious experience in today's economic environment. When the marketing department wants to spend money to place radio or newspaper advertising, it is easily supported by the rationale that these expenditures improve income. Similarly, the IT department can often secure funds for a new server, memory upgrades or an improved phone system because management is afraid of lost productivity.

Why is it that these projects can receive funding while repair or maintenance parts are so difficult to justify? It may be because arena operators are not effectively relating the direct correlation to productivity and superior customer service. Many operators think that senior management should be aware of the importance of good maintenance and the importance of a capital improvement budget. They don't think they should have to explain their department's needs every year. Let's consider some ideas for changing this environment.

Maintenance consultant and expert David Todd Geaslin, instructor for Texas A&M University's managing maintenance program, uses his own term, "inverse-square rule of deferred maintenance," to compute the potential cost of deferred maintenance. This is a way for maintenance managers to easily establish the significant differences in maintenance costs versus repair costs. Geaslin explains: "The risk/reward for under-funding the maintenance operations is not the established 2:1 but more often proven to be near 30:1."

If you find that building and equipment maintenance funds are limited by budgetary constraints, consider it normal in today's economic times. If they are limited because the operations manager allows them to be, that's another matter. There probably isn't an ice arena operator in the country that doesn't have deferred maintenance headaches brought on by the tight budget situations we are experiencing today. However, smart professionals should work hard to find ways to maintain the budget at necessary levels without alienating themselves from senior managers who face a myriad of other financial pressures. One way is to show management how good maintenance can actually save funds in the overall picture. Condenser maintenance is a good example:

Annual cost of proper condenser maintenance
An arena condenser, like any piece of equipment, requires regular preventive maintenance. Here is the approximate annual cost to maintain a typical condenser:

Grease tubes $ 25
Motor shims 10
Replacement parts (belts, couplings, etc.) 160
Mechanic - 2hrs./month@$15 360
$555

Cost of condenser breakdown due to improper maintenance
If the condenser breaks down due to the parts not being regularly inspected and maintained, emergency repairs are just an overheated bearing away. Below is the approximate cost to get the condenser repaired and operational. This cost does not include any lost revenue from not having ice because when the condenser is down the ice plant will not operate.

New fan motor $760
New fuses 45
New motor contactor 165
New bearing 114
Repairman hours - 20 hrs.@$25 500
Service contractor labor - 4 hrs.@$75 300
2 industrial fans 235
Lost revenue from canceled rentals 1,000
$3,119

The industrial fans were put in place to operate overnight because the breakdown occurred after hours. When the ungreased bearing overheated, it damaged all the parts listed above. The quick-thinking operations staff members were able to put temporary fans in place and keep the plant running.

Every ice arena operator/maintenance person must be able to provide logical and detailed estimates for the cost of deferred maintenance, especially on the ice plant, heating, ventilation and air conditioning packages and ice resurfacer(s). If any of these pieces of equipment malfunction, the arena is often out of business for some period of time.

For professional ice arena managers, equipment failure is not acceptable. The image of a resurfacer broken down on the ice or opening the arena in the morning to a swimming pool instead of an ice sheet is material for bad dreams. Operations managers must be able to justify the importance of proper maintenance of operating equipment. Include cost estimates for possible failures that are likely to occur without proper maintenance. The message must be "It is never acceptable to put off proper maintenance on equipment or the facility." The cost of good maintenance is less than emergency maintenance, every time.

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