

New-generation systems save energy, speed up ROI

BY IAN FLETCHER

In designing future broadcasting operations, project and operations engineers, along with broadcast managers, are increasingly stepping back to look at the big picture — beyond the basic layout and system specifications.

Given the rising operation cost, many broadcasters are assessing their facility design and equipment costs using an ROI (return-on-investment) analysis. While existing operations strive to achieve greater savings with their current design, those being developed from scratch can compare a variety of alternative configurations available. In addition to standard cost factors such as facility design-and-build, overheads, operations, equipment purchase and maintenance, and staffing, many planners are also looking at how to reduce future spending on energy and mitigate impacts on the environment.

Broadcast technology consumes a great deal of energy,

including for playout and automation. A single HD channel based on conventional automation and playout equipment consumes around 2,700W, excluding consumption by necessary hardware such as A/V routers shared with other channels and cooling systems.

However, the same channel configured with much more energy-efficient IT-based technologies, such as the OmniBus iTX, present a very different profile. In fact, a next-generation iTX system can save around 40% of energy, which is very significant for ROI and environmental impact.

Fortunately for broadcasters and this planet, environmental responsibility coincides with sound business principles. The same HD channel configured with next-generation technology feeding on 40% less energy also halves the capital investment for purchase and installation for conventional equipment with equivalent configuration. Lower initial investment, energy con-

sumption and operating costs make for a very rapid ROI.

The same principles hold true for SD channels using the iTX. Such a solution makes it possible to bring production and transmission operations together in a single advanced software running on standard IT hardware.

By leveraging the performance, cost and connectivity benefits of industry-standard hardware, the iTX makes online storage, video serving and nearline storage simpler, and far more economic to install, maintain and upgrade. In addition, because the software handles video effects, logo insertion, character generation and aspect-ratio conversion, the traditional investment on dedicated equipment for those tasks is unnecessary.

Being an all-in-one, easily-driven software application, the iTX enables broadcasters to design channels with a high degree of crafting, visual effects, squeezebacks, graphics and unprecedented flexibility, even assembling content almost on

the fly. Repurposing content for various channels, formats and delivery platforms becomes much easier and cost-effective too. Instead of 10 versions of a promo, for example, a broadcaster can make one, and then easily add the branding that suits the broadcast times and channels.

This workflow flexibility and streamlining, combined with the lower cost of training staff to drive one application covering a wide range of tasks via a consistent user interface, makes a huge difference to a broadcaster's operating efficiency.

As a contributor to this efficiency and the ROI, the impact of energy savings on a typical broadcaster running multiple iTX-based channels is considerable.

Looking at the wider picture, if we consider the implications of a 40% saving across all current broadcast and distribution platforms globally, in addition to the impact on profitability for individual broadcasters, the environ-

mental picture that emerges is certainly one to think about. There would be a reduction of around 100,000 tonnes of carbon-dioxide emissions — the equivalent of nearly 11 million gallons of gasoline, nearly 21,500 cars taken off the roads and over 1,500 acres of forests preserved per year. Of course, the number of channels is growing daily.

The OmniBus iTX enables broadcasters to bring the benefits of simpler, more efficient and cost-effective IT-based hardware into the automation and playout field. With the feature set that the iTX provides, and the way it streamlines the automation and playout chain, these benefits add up to a compelling case for broadcasters to achieve the most efficient operation possible in existing and new channels, while getting the best ROI — and discharging their corporate environmental responsibilities.

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New-generation automation systems like the OmniBus iTX can yield more savings and returns for broadcasters.