

Total Cost of Ownership (TCO) & Return on Investment (ROI)

WHAT IS TCO & ROI?

Total Cost of Ownership (TCO) is the total of the purchase price of a system plus the operational costs during its lifecycle (usually 3 to 7 years) and the End-of-Life (EOL) decommissioning costs.

Return on Investment (ROI) is a calculation used to measure the gain from an investment relative to its cost and is typically shown as a percentage.

Both the TCO and ROI should be considered as important criteria when assessing tenders and calculating projects. They provide a true measure of the costs and value of a security system solutions five years from now, not solely on the day it was purchased, and for how much.

The following formula is used to work out TCO:

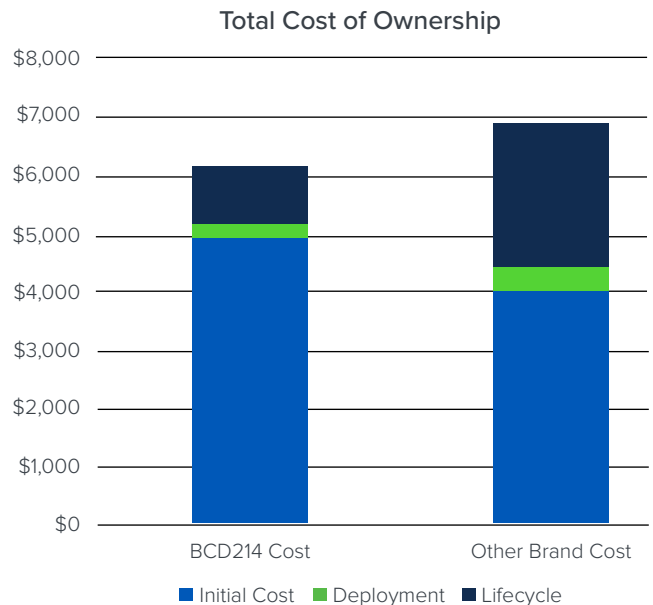
$$\text{TCO} = \text{Initial Cost} + \text{Maintenance} + \text{EOL costs}$$

WHAT TO FACTOR INTO YOUR CALCULATIONS

- **Purchase Price** - The purchase price for the video recording and management system is a key component in the total solution cost. When comparing pricing, it is imperative to compare features, to avoid looking at systems with sub-standard specifications and performance levels. At BCD, we guarantee our performance.
- **Installation** - What will it cost to deploy these systems at the customer sites? BCD has a Professional Services team that can deploy your systems at a low cost.
- **Lifecycle** - These are the costs associated with maintaining system uptime. These are generally covered with a 3, 5, or 7-year warranty. More important than warranty is uptime; getting that system back to 100% without having to involve an on-site warranty. It is also imperative to compare the power and cooling requirements between systems as these costs will vary widely between offerings.
- **Training** - Is training or certification required? Should you not have the system staff to provide this requirement, BCD's Professional Services can deliver this service on your behalf.
- **Hidden Costs** - These extra charges run the gambit from freight costs, to truck rolls and future system expansion. It's a good idea to get documentation on system scalability and reliability, as well as the capability to add additional software functionality – video analytics, and artificial intelligence, for instance – during the product life-cycle. While it's important that your main Video Management Software can support it, it's more important that the video appliance can drive it.

COMPARING SYSTEMS USING TCO

In the example below, there are two systems, each with individual costs



As the data indicates, the initial cost of the BCD-214 is slightly higher than that of the other brand. However, the overall TCO of the other system is substantially higher. This is due to a higher cost to deploy the system, as well as the operating and maintenance costs of the system through its life-cycle, taking into account the additional truck rolls needed to maintain the system. Every BCD solution provides integration into the VMS platform to better automate the installation and day-to-day operation of the solution. This also benefits the security integrators support desk with lessened risk of missing an alarm or significant event, thus reducing liability.

TCO CONCLUSION

Building a cost-efficient Enterprise Surveillance Solution can be challenging. Utilizing TCO in your process, better prepares you monetarily in the right direction of the length of your service contract, but also adds the value of maintaining the bulk of your initial profit. There are many things to consider in costing a system beyond the purchase price. Primarily, the cost to your organization to support it over the course of the project. Incorporating a TCO mentality better prepares you for the twists and turns along the project path

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USING TCO TO FIND THE ROI

Once you have calculated the TCO on the system, you are well on your way to doing the same for your Return on Investment. This practice will allow you to best understand the total value of a system, in order to make the best sourcing decision for your organization.

ROI is typically expressed as a percentage and is worked out using the following formula...

$$\text{ROI} = \frac{\text{Value from Investment} - \text{Cost of Investment}}{\text{Cost of Investment}}$$

WHAT TO FACTOR INTO YOUR VALUE FROM INVESTMENT

- Outline the specific Values** - Pinpoint the existing challenges being faced, and how this solution can resolve those. Also, always assume more challenges can arrive in the future, and if this solution will be able to resolve those as well, either through the advanced technology within the system, or by there being additional scalability to grow within the existing chassis.
- Direct Value** - How can this solution prevent losses, whether from burglary, loss prevention, or vandalism? For some customers, this solution is a reactive purchase, solving previous issues that incurred losses, either on merchandise or on the resolution.
- Indirect Value** - Could this new system reduce any legal costs from accident claims or reduce your insurance costs? Does this solution include any integrations or plug-ins that allow server management from the desktop, similar to managing the cameras, rather than the IT department?
- Value created in new areas** - Does this solution provide enough throughout to add additional software layers over the next years, such as video analytics or Artificial Intelligence (AI), while still maintaining pristine video footage?
- Soft Values** - Is this system "vertical market agnostic?" Will the retail security system improve staff retention and customer experience? Will the school security system decrease bullying and help attract more students? Will the city surveillance solution contribute to reduced traffic congestion, minimized pollution and improved reputation among citizens, visitors and businesses? This is not a one size fits all market place.



$$\text{BCD214 ROI} = (8,900 - 6,200) / 6,200 = 44\%$$

$$\text{Other Brand's ROI} = (7,100 - 6,900) / 6,900 = 3\%$$

Because the BCD-214 system has more value, its ROI is much higher than the other system. This could be due to several factors, such as, no need to upgrade the hardware to accommodate new software due to be installed during the systems Life-cycle, or simply that the BCD-214 manages itself daily with its custom VMS integrations and plugins, which helps with employee turnover.

ROI CONCLUSION

Total Cost of Ownership is a very useful tool in helping you make the correct commercial decision. When partnered with ROI, this takes this to another level and helps you see the whole picture, vividly. This is critically important for long term project success, both technologically and commercially.