ABBOTT Total Value of Ownership Experience

Sustainable Growth and Cost Reduction through TCO (Total Cost of Ownership)
Why should TCO be considered important in healthcare?

(TCO; Total Cost of Ownership, TVO; Total Value of Ownership)

'Smart' management requires reduction in TCO rather than a one-time initial investment

Dealing with people’s lives separates healthcare from other industry sectors. But the humanitarian life-saving efforts must be joined with concerns about cost and efficiency to ensure sustainability. Small and medium-sized healthcare companies are required to meet the needs of patients by having access to the highest quality products and services in a cost-effective environment. As local healthcare markets experience rapid change, governments are seeking a reduction in medical reimbursements, even as the demand for diagnostic testing rises. While the quality of advanced medical devices improves, the purchase of such devices cannot guarantee specialized medical services and a competitive edge. TCO (total cost of ownership) is a means of staying one step ahead of the competition. Managerial efficiency in the healthcare sector must produce optimized results in terms of overall healthcare services rather than piecemeal cost reductions in specific areas.

Using innovation to respond to challenges in diagnostic testing

Medical institutions must manage changes resulting from increased pressure to improve financial performance and a decrease in reimbursement. Those that fail to generate reasonable profits are unable to deliver the kinds of medical services patients demand. Korea Clinical Laboratory (KCL) is responding to these changes by making innovations in diagnostic testing that deliver the utmost in patient care while enabling private medical institutions to achieve profitability. Kim Sung-ho, head of KCL, has made a commitment to provide the most reliable medical services with the highest quality in the industry. Purchasing state-of-the-art medical equipment from global manufacturers was one of KCL’s methods to maintain professionalism. In addition, unlike other companies in the healthcare sector, KCL adopted the concept of TCO, to obtain a leading position in the industry.

Why is TCO worthy of notice?

The American research and advisory firm Gartner suggested the concept of TCO in 1997. Though favored by many businesses, its use in medical institutions is limited since professional managers are rarely in charge of these organizations. TCO refers to the total cost to manage an organization, which covers equipment investments, maintenance costs, employee training, technology, and other direct and indirect expenses. Most laboratory medicine institutions in the medical industry are aware of the direct costs for diagnostic equipment and diagnostic reagents. However, they fail to consider the total operational costs including total labor costs, training expense, retesting, floor space, medical waste disposal, consumable usage and lab improvements etc. Mr Kim is acutely aware of these business concerns and has adopted a financially sound approach.
“Professional managers realize that total expenditures include not only one-time purchase costs but also maintenance costs after the purchase. According to Henry’s Clinical Diagnosis and Management by Laboratory Methods, other costs (excluding diagnostic reagent spending) account for 85% of the total cost to operate a laboratory. This holds true for KCL. As a result, I need to gain control of TCO for managerial efficiency.”

- Kim Sung-ho, Head of KCL

With his extensive experience in hospital management, Sung Ik-jung, COO of KCL, endorses Mr. Kim’s philosophy of creating a synergy effect and sees Abbott’s TCO-based cost management as an integral component of medical managerial efficiency.

“The TCO-based approach greatly improves EBITDA (earnings before interest, taxes, depreciation, and equipment amortization); and strengthens the overall quality and measurement capability of a laboratory. However, most managers of healthcare service providers are not familiar with TCO and fail to measure and manage their organization’s overall costs. Patrick Gontard, CEO of LabExa Group, visited KCL two times in 2016 and 2017 and said that his laboratory increased its net profit by 20% to 35% through the TCO-based approach. That was an eye-opening result and one we wanted to replicate!”

- Sung Ik-jung, CEO of the Dong-a Medical Foundation

Abbott Laboratories, the total solution partner for cost reduction and value creation

With today’s emphasis on cost management, the healthcare sector must join others in adopting TCO. While the concept is new to many managers of small healthcare provider organizations, the TCO-based approach is now considered a must-have in improving decision making, managing costs, and improving service quality. Before switching to Abbott, KCL had been using a different multinational diagnostic provider for 16 years but the results failed to keep KCL ahead of the curve in the rapidly changing healthcare industry. The TCO management solution suggested by Abbott analyzes KCL’s entire laboratory diagnostic operations, recommends improvements in laboratory workflow, analyzes fixed, variable, hidden, indirect and direct costs, and then offers sound improvement measures designed to increase improve operational efficiency.

Abbott’s solution delivers measurable benefits in cost reduction and customer attraction

“Abbott’s TCO-based approach creates improvements to EBITDA and attracts, and retains customers.”

- Sung Ik-jung, CEO of the Dong-a Medical Foundation

A three-day TCO workshop in March 2017 gave KCL the ideal opportunity for change. Combining a complete lab assessment with a practical workshop using KCL data, Abbott developed action items which would improve the underlying processes and systems. Without these changes, additional expenditures would be necessary to mobilize personnel for corrective measures including recollection of blood samples and repeated operations of machinery leading to an increase in TCO. While these problems increase costs, they also compromise the quality of healthcare services and impose an extra burden on patients for retesting.

Note 1) McPherson: Henry’s Clinical Diagnosis and Management by Laboratory Methods, 22nd ed. (https://www.elsevier.com/books/link/link/9781437709742. ELSEVIER)

Note 2) Earnings Before Interest, Taxes, Depreciation and Amortization (refers to a company’s net earnings, before interest expenses, taxes, depreciation and amortization are subtracted.)

Change in EBITDA\(^2\) after the TCO-based approach through the solution offered by Abbott

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<thead>
<tr>
<th>Change in EBITDA(^2)</th>
<th>Before</th>
<th>After(Abbott)</th>
<th>TCO Workshop</th>
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<tr>
<td>Expected Results</td>
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<td>10%</td>
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“At the workshop, we reviewed Non-Production, Production, and System categories and identified 45 areas that required improvement.”

- Kim Sung-ho, Head of KCL

The selection of Abbott was not a smooth process for KCL. Above all, the relatively higher initial costs to purchase diagnostic equipment and reagents compared to those of other solution providers were the biggest obstacles. But KCL chose Abbott after reviewing cases where Abbott’s TCO-based approach had been applied.

Abbott is at the forefront of innovation and personalized solutions

“I’ve learned lots of things from Abbott, and without their help, it would have been difficult to incorporate a TCO philosophy into our management process. I often say to my workers, ‘Abbott is our future. Our goal is to become a company like Abbott, to provide Abbott-like services, and to make our customers promote KCL to others.’”

- Kim Sung-ho, Head of KCL

Abbott was able to go into partnership with KCL because it invested time in understanding how KCL operated and what its needs and pain points were, rather than simply selling its products. Abbott’s solution provided a suite of advanced diagnostic instruments, extensive reagent menu, on an automated platform. A shared focus on quality improves KCL’s reputation for medical testing services, which benefits patients. Improved efficiency in delivering diagnostic services became possible by implementing Abbott’s TCO management solution that called for having the right number of workers being managed autonomously.

Kim Sung-ho and Sung Ik-jung are now using more information and their shared vision to implement KCL’s strategies for the future and adoption of Lab 4.0 (based on Industry 4.0 concept, which examines how innovation and Big Data can revolutionize the industry) is creating healthier and happier lives for people. We’re looking forward to a future shaped by KCL and Abbott.

Improved level of satisfaction among employees after adoption of the solution offered by Abbott

“I knew Abbott was a reliable global provider of systems and diagnostic tests but adoption of the solution by Abbott was not easy because of the pricing. Among the service offerings from the Abbott solution, I think having predictive alerts on its instruments is most important because it can predict when an instrument is going to go down and alert our staff so that Abbott engineers can pro-actively manage the situation. This reduces instrument downtime and increases work efficiency. Thanks to the solution, KCL can provide test services as a commercial laboratory without interruption. Abbott’s academic support is also exemplary.”

The best benefit obtained at the TCO workshop - a wider vision

“The TCO workshop hosted by Abbott was very impressive in that we learned how to improve our entire pre-analytical process. For example, after the workshop, we focused on the process of specimen collection and provided our customers with an enhanced reagent order request form. We also provided portable centrifuges to selected hospitals to deal with problems such as hemolysis of blood samples which can cause errors in reporting of test results. We want to ensure we provide extremely accurate and reliable test results to patients visiting our customers (hospitals)”

Creation of value for customers equals the growth of KCL

“KCL has an advantage in swiftly and accurately responding to the needs of the clinics owned by individuals and small-sized clinics. Like a family doctor, KCL can have instantaneous communication with customers to share test results. Since small-sized clinics are likely to be alienated from new test methods or information, KCL is devising ways to provide better medical services and improved information sharing for patients visiting customers (hospitals)”

Cho Kyung-ja, Medical Director of KCL

“Abbott enhances the value of KCL’s customers as well as KCL itself.”
Kim Sung-ho, the Head of KCL

While Mr. Kim majored in electronic engineering, his career began in a field unrelated to his major. He worked in fields unrelated to diagnostic testing for several years, before he began his career in diagnostic testing by chance. In 1996, along with his colleagues, Mr. Kim established Korea Clinical Laboratory (KCL) and began to provide healthcare services, including diagnostic tests. With his vision of the promising future in diagnostic tests, he has developed KCL into one of the best private medical foundations during the last 20 years. He founded KCL to realize the fundamental value of ‘respecting life’ and provide high-quality medical services. To realize the vision, Mr. Kim provides high-quality test services to hospitals and patients via efficient organization management, profound knowledge of medicine, and experienced pathology specialists specializing in diagnostic tests while promoting the value of sustainable development.

Sung Ik-jung, CEO of the Dong-a Medical Foundation (COO of KCL)

Mr. Sung stands alone with a degree in hospital administration among Korea’s chief executive officers of commercial laboratories. After joining Dong-A Pharmaceutical in 1989, he worked in the Diagnostics Department providing healthcare services, and established Sun Phil Clinical Medicine Laboratory in 2000. Mr. Sung became the CEO of the Dong-a Medical Foundation in 2004, and then established KCL with Mr. Kim following an M&A among diagnostics service providers. He serves as a joint manager and COO of KCL to utilize his expertise in hospital management. As a prominent and respected leader in the Diagnostic industry in Korea, Mr Sung speaks and presents to his peers on Abbott’s unique TCO philosophy and the results it generates.

Cho Kyung-ja, Medical Director of KCL

Before joining KCL in 2014, Ms. Cho worked at Sekang Hospital. She believed that large medical laboratories could not cover all hospitals and clinics in Korea, and thus small and medium-sized laboratories should enhance their competitive edge to provide high-quality medical services. As the clinics owned by individuals and small-sized clinics face difficulty when communicating with laboratories, Mr. Cho is committed to providing test results more swiftly, offering new information to help customers not be alienated from information, and developing expertise while growing together with customers, which will lead to improvement in the quality of services offered to patients.
Abbott Diagnostics is helping customers achieve measurably better healthcare performance. Our team brings their healthcare knowledge and deep understanding of your business and actively partners with you to help you deliver critical performance metrics.

We have developed a harmonized family of innovative systems, informatics and automation solutions with the specific purpose of streamlining your lab operations. Our professional services solutions will help you deliver greater operational productivity with your existing resources, through maximizing throughput and capacity, reducing unexpected downtime and improving overall operational efficiency.