NEW SYSTEM INCREASES LABORATORY PROFITABILITY

The Challenge

Breakthrough discoveries have led to an explosion of new innovative new testing procedures in the medical diagnostic market. This has put a tremendous strain on the laboratory information management systems (LIMS) that are required to manage the information flow at every stage of the testing procedures. Traditional LIMS vendors have struggled to keep up with the rapid introduction of new procedures, the increased requirements for interconnectivity with other systems, the rising need to handle ultra-large data sets for each patient and test, and the sheer complexity of new tests, particularly in the genomics and molecular diagnostic fields. In addition, the rising cost of LIMS maintenance and service has contributed to the rising costs of medical testing.

These problems have a profound impact on both laboratories profitability and patient care, as over 70% of healthcare decisions are made based on diagnostic testing results.

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The Technossus Solution

The Technossus team revels in difficult problems. As their multiple wins at worldwide hack-a-thon events prove, they excel at meeting tough challenges.

As a result, Technossus has earned a great reputation in the life sciences field as the go-to team for solving complicated LIMS problems. In addition, they have created a new LIMS system, code-named Helix, that solves all of the thorniest problems associated with managing complex laboratory processes. The Helix system architecture was designed with a deep understanding of the rapidly evolving diagnostic testing market, where adding new diagnostic tests is often a financial imperative for both new and existing labs.

- **Rapidly assimilate new testing procedures.**
  Helix's flexible system architecture allows laboratories to add new testing procedures without disrupting existing workflows. It is built to handle the processing, analysis, and storage of the vast quantities of data that some new testing procedures generate. In addition, Helix can integrate results from traditional diagnostic testing procedures and the growing number of genomics and molecular diagnostic tests, which improves both lab efficiency and patient care.

- **Significantly lower operating costs.**
  As a cloud-based based system, Helix is inherently less expensive to maintain and service. In addition, Helix's ability to integrate with medical billing systems reduces operating costs associated with manual steps in billing and increases cash flow by as a result of more prompt billing and payment cycles.

- **Integrate with other health care systems.**
  Helix was designed from the ground up to integrate with other systems, including other laboratories, hospitals, physician groups, and medical billing systems. These integrations not only lower operating costs, but also enhance patient care. In situations where delays can critically impact patient health, Helix can tangibly improve patient outcomes.

- **Increase collaboration.**
  The popular "Send-Out" module of the Helix system makes it easier for laboratories to subcontract some kinds of testing while still maintaining a comprehensive view of patient testing results. In addition, this feature makes it easier for pathologists to consult on difficult cases with pathologists in other labs.

  Dramatically improve reporting to physicians.
- The Helix LIMS includes physician and patient portals which provide easier and more rapid access to test results for laboratory clients. In addition, Helix includes an outstanding test reporting module that allows labs to create highly visual, customized reports that provide physicians with a better understanding of the testing data and results.

  Lower risk of errors.
  The Helix system reduces the risk of errors by increasing system integration, decreasing manual processes, and improving physician access to testing results.

The Result

Helix has proven to increase profitability, lower error rates, increase efficiency, and improve patient outcomes across all clients that have adopted the Helix system.

$2.1B	5%	70%
Laboratory information management market size by 2021	**Laboratory testing cost as a percent of total healthcare spending**	**Healthcare decisions based on a laboratory test results**