# **SPOTLIGHT** feature **LIMS & Lab Automation**

# **Cost Reduction in Healthcare LIMS**

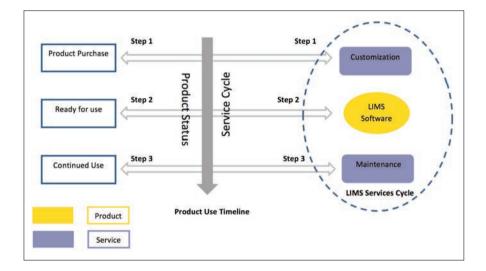
Vimal Singh, Lead Procurement Analyst, Beroe, Inc

The usage of Laboratory Information Management Systems (LIMS) is reaching maturity in developed economies such as the United States and Western Europe. However, measures taken to reduce costs in the service segment are far and few. This whitepaper will look at the cost comparison between different LIMS service roles and also across geographies to arrive at a consensus on reducing costs for LIMS end user segments.

#### Problem Statement

The LIMS industry is broken down into two subcategories; LIMS products and services. The products are in the form of software are installed in labs for efficient management of data. The product is customised according to the needs of the client.

The link between the products and the services are depicted in the graphic below.



Services such as Installation, Application Development and Customisation are performed in the initial part of the process (Step 1). Post completion, the product is ready to be used by the organisation (Step 2). The next step will involve administrative duties and maintenance of the product (Step 3)

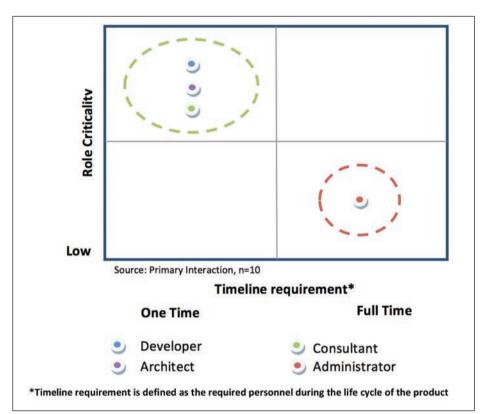
These services are indispensable for the product life cycle. However, the same essentiality has caused the efforts to obtain cost savings to remain limited in detail. This is the crux of the problem and this research will aim at providing a solution to it.

## Solution

LIMS services can be broken down into 4 categories with the following skill sets attributed to them.

SI. No.	Service Personnel	Function
1	Architect	Solution Design, Implementation
2	Developer	Customisation, Implementation
3	Administrator	Implementation, Support and User Training
4	Consultant	Planning and decision making support across the value chain

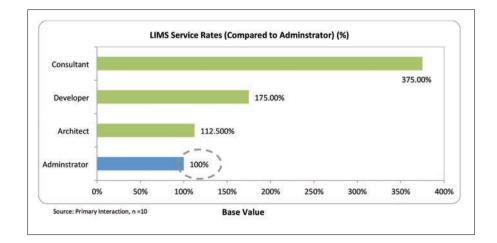




## Cost Differential between different services

Through the cost differential graph below, it is indicated that compared to administrators, developers and consultants are paid 275% and 75% more.

This does not undermine the Administrator service costs but points towards the fact that in terms of reducing costs, the potential of cost savings is higher for those roles.



A holistic solution can be determined by examining elements such as the Outsourcing Strategy, Cost Differential and the Geographic Price Variation.

#### Outsourcing Strategy Development

As the service role clarity has been achieved, let us look at the criticality of the service followed by the timeline requirement of the service throughout the product life cycle.

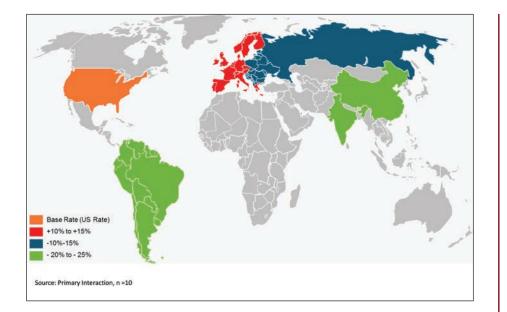
The following grid illustrates the details required to formulate the sourcing strategy.

The grid above leads us to understand that engaging with Developers, Consultants and Architects on a Fee For Service (FFS) model is the viable option. However owing to the full time requirement of Administrators, outsourcing personnel on a FFS would not be feasible. They can be hired on a FTE basis (or) depending on regional talent availability, this can be kept in-house.

# Geography Scoping

The next step looks at the average rates of LIMS services in different geographies. The percentage deviation in rates has been calculated using rates in the US where a majority of the services are rendered.

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## Global LIMS Services Rates

From the rate map above, it is clearly noticeable that India, China and Latin America are the regions that can be leveraged for cheaper LIMS services.

The supply base consists of product providers themselves providing services, specialist companies providing services and IT companies. The supply base in India is strong with the presence of numerous IT companies such as Infosys, Tech Mahindra etc. The internal demand is currently low compared to the US and Western Europe due to the low penetration of LIMS in these markets.

In Western Europe, the 2nd biggest market for LIMS Services (in terms of demand), a near-sourcing approach can be adopted by outsourcing to regions in Eastern Europe which provides a rate benefit of 10%-15%.

#### Conclusion

The advantages of outsourcing LIMS services have been discussed with a focus on specific services, geographies and supply bases. All of the above data propounds the cost benefits of outsourcing to different geographies. However, quality of the personnel can still be an issue especially for localised specialists. This can be evaluated on a case to case basis during the due diligence process performed by clients. It will also be interesting to observe the change in rates with increasing demand in low cost countries like India and China.

"In the area of TCO, 50% of the benefits of standardisation were found to be in hard cost reduction, which includes expenses associated with hardware, software and IT operations. Additional savings were derived from IT staff savings."

Jim Neville, Director of Marketing & Business Development - Informatics & Services

#### Sources

The surveys, matrices have been based on discussions of LIMS service providers and industry experts contracted under Beroe.

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Vimal Singh is a Lead Procurement Analyst with Beroe Inc., a global provider of customized procurement services specialising in sourcing, supply chain visibility, financial risk analysis and environmental impact to Fortune 500 organizations.

Vimal Singh specialises in tracking the R&D Pharma market. He has worked on multiple projects for many Fortune 500 clients involving categories such as Clinical IT, Pre-Clinical IT, R&D Pharma technology etc.

Vimal Singh earned his degree in Mechanical Engineering from R.V College of Engineering, Bangalore

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