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BIG DATA AND MU SIGMA: THREAT OR OPPORTUNITY?

Dhiraj Rajaram, the young founder and CEO of the largest pure-play provider of decision sciences¹ and analytics solutions firm Mu Sigma, was happy at the launch of its latest analytical product muHPC™² (for High Performance Computing). It would expedite Big Data analysis programs and efforts of large multinational companies through standardized statistical functions for exploratory analysis, data clustering, and linear modeling. The innovative muHPC™ developed on top of Cloudera³ had been successfully tested and were found to be 2-4 times faster⁴ than leading commercial software in this domain.

"We talk with so many large enterprises that want to leverage open-source tools such as R and Hadoop but simply cannot find staff with the requisite skills. muHPC directly addresses that market need by providing a packaged set of the most common R-based algorithms that can be used in a Hadoop environment right out of the box. muHPC is a breakthrough concept that removes significant barriers to Big Data analysis."

- Zubin Dowlaty, Head of Innovation and Development at Mu Sigma⁵

¹Mu Sigma launches muHPC, packaged MapReduce algorithms for Hadoop, Kdnuggets, June 27, 2013, <http://www.kdnuggets.com/2013/06/mu-sigma-launches-muhpc-packaged-mapreduce-algorithms-for-hadoop.html>, accessed February 15, 2014.

²<http://www.mu-sigma.com/analytics/platforms/muHPC/muhpc.html>, accessed February 15, 2014.

³Mu Sigma algorithms help companies accelerate Big Data analysis. (June 2013). mxmindia, <http://www.mxmindia.com/2013/06/mu-sigma-algorithms-help-companies-accelerate-big-data-analysis/>, accessed February 15, 2014.

⁴<http://www.mu-sigma.com/analytics/pressreleases/mu-sigma-helps-companies-accelerate-big-data-analysis.html>, accessed February 15, 2014.

⁵Mu Sigma helps companies accelerate Big Data analysis with first packaged MapReduce algorithms for Hadoop, Marketwire, June 27, 2013,

This case was written by Professor Indranil Bose at the Indian Institute of Management Calcutta and Debprotim Dutta. The case was prepared solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation.

Mu Sigma introduced specialized data analytics based solutions for marketing, supply chain and risk analytics problems across nine diverse industries while it witnessed an astounding rate of revenue growth of 886%^{6,7} between 2008 and 2010. The firm focused on the growth opportunity that arose out of Big Data analytics which was a hotly contested domain and included various global behemoths such as IBM⁸, HP, etc, and pure play Big Data analytics vendors such as Splunk, Cloudera among others.

Mu Sigma delivered analytics projects in USA from their Bangalore, India delivery center. The low cost arbitrage that existed between the two countries, coupled with superior English language skills, abundant pool of talented workforce and time difference leading to quick turnaround times made a compelling and viable business proposition. However, the operating model started undergoing a transformation with the rise of other low cost service provider countries, visa restrictions, and demand of more geographical proximity with business prospects. Though Mu Sigma traditionally hired fresh graduates and imparted extensive training to them, the advent of Big Data technologies necessitated the hiring of employees with advanced academic credentials. Increasingly, competitors tried to poach decision scientists trained at Mu Sigma with the promise of higher salaries.

Dhiraj realized that the challenges in front of him were manifold. What should Mu Sigma do to thwart the competition and capture more market share? How should Mu Sigma transform itself to keep pace with the ever evolving technology? Should the hiring mix be altered? Will the business model of delivering analytics projects through its offshore delivery be sustainable in the long run?

http://www.moneyhub.net/scripts/cgiip.wsc/globalone/htm/news_article.r?vcnews-id=1000238, accessed February 15, 2014.

⁶http://blogs.wsj.com/venturecapital/2011/12/28/mu-sigma-lands-big-money-for-big-data/?mod=google_news_blog, accessed February 15, 2014.

⁷http://www.domain-b.com/infotech/itnews/20111229_investment_oneView.html, accessed February 15, 2014.

⁸Kelly, J., Floyer, D., Vellante, D., & Miniman, S. (February 19, 2013). Big Data vendor revenue and market forecast 2012-2017, Wikibon report, http://wikibon.org/wiki/v/Big_Data_Vendor_Revenue_and_Market_Forecast_2012-2017, accessed February 15, 2014.