

Analyzing Direct Marketing Data with R

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Lucid Commerce LTD Inc. (Lucid), headquartered in Seattle, WA, provides analytic solutions for direct marketers to maximize their revenue of investment (ROI) from targeted advertising. Lucid has built several advanced statistical models using R and have them integrated into our real-time media optimization and planning system, those models have significantly boosted Lucid's media planning performance and also simplified the analytics process. This talk will demonstrate how to create an R tool chain which combines *Microsoft SQL Server 2008* for data storage and data warehousing, *Microsoft SQL Server Reporting Services (SSRS)* for report rendering. By utilizing R packages such as **MASS**, **RPART** and also many of our own R scripts, we extract large amount of data through **RODBC** library, have them analyzed and send the outputs back to the database. We also utilizes R's powerful graphics components together with several libraries such as **Lattice** to generate reports and visualize high dimensional data. This talk will discuss both the practical challenges with operating R on a large scale as well as the areas where the language excels.

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