Section 1: Week 1: Evaluate Tools for Statistical Applications

Nate Bachmeier

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# Evaluate Tools for Statistical Applications

When a project requires significant investments into statistical modeling, it can quickly become prohibitively expensive and tedious to perform these calculations by hand. Instead, the analyst must defer to software solutions to transform raw data values into business intelligence. Luckily there is a vast ecosystem of tooling that can specialize in different scenarios, such as interactive ‘slicing and dicing’ versus offline batch processing. An organization like NCU-C also must consider how the various products align with existing data platforms. For instance, a business that relies on traditional relational data stores might have more flexibility than another institution that requires graph technologies. Just as remodeling a kitchen necessitates hammers, screwdrivers, and tape measures—statistical applications can involve multiple tools. Consider the situation where data begins life in unstructured data lakes, and through an extract transform and load (ETL) process becomes a geographical map. This situation could