XNF - Meeting The Promise of Big Data
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Convergence of mobile, web and cloud applications is leading to the collection and accumulation of large amounts of data. This data holds a treasure trove of information. Among the many legitimate uses of such data is the potential for uncovering patterns of behavior that can help organizations fine tune their products and solutions to meet the expectations of their customers in real time.

That's the promise of Big Data.

There is one significant problem though, Big Data is just that – lot's and lot's of data. Extracting useful actionable intelligence from Big Data is today very expensive.

Many existing technologies take a brute force approach by allowing applications processing big data to run in parallel in the cloud in the process creating more Big Data. In order for enterprises to truly take advantage of Big Data, what is required is a data transformation platform that can be used to normalize data, creating more structured data from less structured data. In fact, if a platform can be used to completely structure data to the point of being able to run standard sql queries on such data, there is significant business value to be gained.

A good question is what level of "structured-ness" in data is good-enough ? This question has been posed before by database developers leading to the development of various normal forms of relational data. In fact a trillion dollar industry was created out of the simplifcation of the management and use of large amounts of data.

If you ponder over that question, it is clear that the answer depends on the query, the query to be answered based on Big Data or Incremental Big Data.

Answering almost any query on the data, let us call that "Generic Big Data" will require a near 100% structuredness with near zero redundancy, whereas answering only a sub-class of questions may work with probably 20% or 50% structuredness in the refined data – let's call this XNF where x can range from 1 to 100.

Fortunately, most businesses are interested in answering a limited scope of questions using Big Data, therefore a value of x closer to 30% or 40% is probably what is required of XNF Big Data.

The next question to ask is, how does one go about creating XNF Big Data !

Transforming 1NF Big Data to a higher a higher order XNF Big Data can be done using several simple transformations. These transformations can effectively "morph" less structured data to more structured data incrementally.

The answer to creating XNF Big Data, then is quite simple – understand the class of queries to be answered, understand the nature of Big Data (to the extent possible) and create a transformation library (XNF-TL). Using the transformation library for each class of questions to be answered, create one or more XNF-Morph.

Ready to meet the Promise of Big Data ? Contact us (**http://www.sankhya.com/contact.html**) today to learn more about how your organization can build an XNF Transformation Library.