Data Analytics

Analytics have been known to be used in business, since the time of management movements toward industrial efficiency that were initiated in late 19th century by Frederick Winslow Taylor, an American mechanical engineer. The manufacturing industry adopted measuring the pacing of the manufacturing and assembly line, as

a result revolutionizing industrial efficiency. But analytics began to command more awareness in the late 1960s when computers had started playing a dominating role as organizations’ decision support systems. Traditionally business managers were making decisions based on past experiences or rules of thumb, or there were other qualitative aspects to decision making; however, this changed with development of data warehouses and enterprise resource planning (ERP) systems. The business managers and leaders considered data and relied on ad hoc analysis to affirm their experience/knowledgebased assumptions for daily and critical business decisions. This evolved as data-driven business intelligence or business analytics for the decision-making process was fast adopted by organizations and companies across the globe. Today, businesses of all sizes use analytics. Often the word “Business Analytics” is used interchangeably for “Data Analytics” in the corporate world.

In order for businesses to have a holistic view of the market and how a company

competes efficiently within that market to increase the RoI (Return on Investment),

requires a robust analytic environment around the kind of analytics that is possible.

This can be broadly categorized into four types. See Figure 2-4.

1. Descriptive Analytics

2. Diagnostic Analytics

3. Predictive Analytics

4. Prescriptive Analytics

