Article

Prof. Jyotiranjan Hota
Associate Professor, KIIT School of Management

Business Analytics : A tool for Organizational Transformation

Business Analytics has made a paradigm shift in the way firms execute their operational, tactical and strategic objectives. Sky is the limit to explore the scope and opportunities in the current context. Business analytics tools are quite useful in usage analysis, product affinity, human resource management, campaign effectiveness and financial intelligence applications. Key issues behind business analytics are to build a performance management and proper business analytics strategy. So the firms should clearly understand the business objectives and metrics. These tools increase firm's agility, decrease operating costs, improve customer loyalty and acquisitions. There is a trend now to gradually replace traditional and licensed software purchases in firms and to adopt subscription based business models. In past, business firms were using data analysis tools in a spontaneous way. However, latest advances in Business analytics technology is playing an important role in automating the analysis process and enabling both data analysis experts and business users to interpret data more easily and quickly. Business analytics are key differentiators, which provide competitive edge to companies across industries. Data mining and analytics techniques which have long been used in the information technology domain are moving into the world of real time and end user personalization. Business analytics are defined as the extensive use of data, statistical and quantitative analysis, explanatory and predictive modeling, and fact based decision making. The field is a subset of business intelligence. The key consumer of analytics is the business user whose job is not directly related to analytics but who must use analytical tools to improve the result of a business process along profit or time to market.

Scope of Business Analytics:

Business Intelligence plays an important role in formulating a strategic framework of organizations. This technology brought a paradigm shift in using historical data to predict future course of action. While business analytics go a step forward to also take care of predictive aspects. It also requires a cultural shift to agree upon a proactive and fact based decision making environment. It provides firms with new insights and fast decision making. Exploring business analytics needs the right focus, right technology, right people, right culture and top management commitments. All analytics are not created equal just like all customers are not equal. Like many other types of software, analytics is designed with wide range of capabilities. Competitive advantage increases with the degree of intelligence. Popular techniques of business analytics are standard reporting, Ad Hoc reporting, On Line Analytical Processing (OLAP), alerts, statistical analysis, forecasting, predictive modeling and optimization. Business analytics are mainly historical and predictive in nature.

Commonly used methods in business analytics include pptimization, mathematical modeling, statistical analysis, market segmentation, data mining and time series methods and econometrics methods. Challenge in methods lies in very slow adoption of different technical methods into the business, little updation of knowledge, lack of business knowledge and the requirement of wisdom to handle knowledge workers.

Key Approaches and Benefits

Principal benefits of business analytics include speeding up and improving decision making process. Other benefits include alignment of resources with strategy, improving organization's competitiveness, providing single view of enterprise wide information systems, synchronizing financial and operation strategy, increasing revenue and realizing cost efficiencies. Innovative firms are now capitalizing on the techniques of business analytics to achieve success in process performance. Analytical competition opened a new way for doing business. Companies have made significant improvements in pricing, fraud detection, customization and retention. There is a union of focus between business analytics vendors and enterprise software vendors. ERP, CRM and SCM vendors

Characteristics	Operational BI	Analytical BI
Focus on	Profitability transactions to drive operational efficiency	Creation and use of intelligence to drive differntiation from the competitors
Decisions types	Operational (day-to-day)	Tactical/strategic
Underlying technology	OLAP query and reporting	Advanced (predictive) analytics
Emphasize on	Customer acquisition	Customer retention
ROI	Moderate to high	High
Measures	Customer satisfaction	Customer value and loyalty
Customer management organized by	Function or product units	Customer segments
Rely on	Information about customer	Information from customers
Type of interactions	Proactive interactions with customer	Real-time, personalized interactions with customers
Scope	Internal, company focus forward improvement	External, customer focus toward improvement
Learning	Long-loop learning and implementation	Short-loop learning and implementation

(Source :www.emeraldinsight.com/0263-5577.htm)

are now integrating analytics to their applications. Firms have already started to integrate analytics software with other software to provide additional context to data and to deliver information at the same point of time when the decision occurs at business process. Now an era is going to dominate confined to subscription based software and open source software vendors in coming 15 years. Business analytics competency centres are evolving to help align management goals with IT requirements. Focus of competency centres are data integration, increase of buying power of business analytics software vendors, single source of knowledge on firm's decision making process and establishment of data governance policies and procedures. Challenges can be segmented into technology and business segments, securing executive support, identifying user requirements, deciding on KPIs, managing data quality and master data, and selecting appropriate tools and interfaces for different user groups. BA projects can include a broad range of software across a technology stack, including data integration, data warehouse management and the various analytic applications and BI tools used by end users. As per Forrester research, self service, pervasive, social and scalable analytics will dominate the marketplace in recent future. Self service analytics focuses on delivering personalized services, helps in quick transactions and increases customer experience. It also facilitates customers to evaluate various options available to them and compare the offerings of a firm with other competitors. Pervasive analytics make analytics pervasive across all channels, touchpoints, transactions, and business processes. Social analytics eases social network analysis which collects data from multiple sources, examines and evaluates effectiveness of relationship. Scalable analytics supports complex databases of all kinds to scale their Entreprise datawarehouse.The enterprise data warehouse is scaling inevitably toward petabytes to support complex content databases required by social media analytics, geospatial applications and clickstream analysis.As per a prediction of Gartner and Forrester in 2011, within few years, Business analytics will be used extensively by hand held devices, will add scale add scale and computational power through usage of in-memory functions. Business analytics will be embedded in social and collaborative software for aid in decision making

Conclusion and future directions

Key focus of business analytics is to build a proper analytics strategy. The tool has no power to convince people in an organization. Right kind of business analytics tool can increase agility of firms, decrease operating cost, improve customer loyalty and acquisitions. Analytics are applied to telecommunication, banking, insurance, retail, manufacturing, finance, HR and technology domains. It is always better to optimize a simple process than a complex one and to optimize a consistent business model than a fragmented model. There are few business challenges that many organizations face while implementing BA software. Many of those are data integration with multiple source systems, quality of data, integration with other enterprise systems of firms, ability to handle complex queries, administration and security and justification of ROI.There are wide range of technologies which supports analytics. Those include artificial intelligence systems, OLAP, data mining, statistical software and reporting tools. However, there is a lack of convergence of analytics at operations and enterprise level. Firms are now focusing on core competencies and depend on service providers for non-core operating processes. So, currently there will be a demand on analytics market for next couple of years.

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» About the Author

Prof. Jyotiranjan Hota is an Associate Professor and Area Chairperson of Information Systems wing at KIIT School of Management, Bhubaneswar. He has more than 14 years of experience in both industry and academics. He is a BE in Computer Science & Engineering from NIT Rourkela and PGDBM from Xaviar Institute of Management, Bhubaneswar. He is an AIMA Certified Management Teacher of Information Systems Area. His area of interest includes business intelligence, analytics and ERP .He has discharged the role of Publicity Chair ,Finance Chair, Programme Committee Member and Reviewer of several International Conferences in India and abroad .

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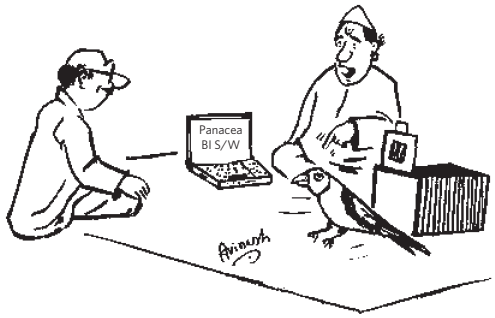

Don't worry, Sir! I have narrated your business problem to my "Analytics Parrot". He will analyse it using this laptop to come out possible solution!