

Analysis democratized – Analytics

Undoubtedly “analytics” is a buzzword today; every student wants a course on “analytics” and its variants – “data science”, “machine learning”, “artificial intelligence”, “big data analytics”; every company says they are building “analytics” and “machine intelligence” practices as new verticals; every manager wants to recruit “data scientists”; and, the media hypes it by talking of “acute shortage” of professionals and the promise of “x.y” million jobs right now! **Is “analytics” new “nirvana”? Is it all so sudden?** Not really, as I elaborate in this blog.

“Analysis” and analysts – professionals who do a full time job of “analysis” have been around for a long, long time. The best known (and best paid, of course) are the “**Wall Street Analysts**” who analyze the stock market behaviour and come up with recommendation for financial institutions (Investment banks, Fund managers and Stock Brokers); an “analyst” is considered good, if his / her recommendations lead to profitable decisions based on the recommendations, consistently over a period of time. The brightest youngsters - often with a PhD in Mathematics, Physics or Computer Science from Ivy League Institutions like MIT- choose to become “analysts”. The number of such successful “Wall Street Analysts” is at best a few thousands. Of course, there are many other analysts – organizations like Gartner that keep producing highly valued (and hugely expensive) “Reports” that are produced by “analysts” who evaluate a whole range of IT products and services; such “Reports” are subscribed to by CXO’s who use them to decide on IT purchases. There are many other “industry analysts”, “election analysts”, “policy analysts” and “security analysts”. All of them generally are “specialists” and their numbers are in hundreds to thousands for each industry / government segments or countries / geographies.

“Analysts” being specialists, make significant investments in understanding their “domain” through education (often a PhD) and training; they collect “data” that too from “authentic sources”, often investing heavily; they use very sophisticated tools (statistical analysis, optimization and simulation) using software that are generally expensive; such sophisticated software needs significant computing power; finally, the results of such in-depth analysis must be communicated exceptionally well using writing and presentation tools (often needing experts who must be deployed at high costs); all in all, at every stage, there are costs involved. Naturally, “**analysis**” **has remained the exclusive privilege** enjoyed by CEO’s and Government / Policy / Institutional heads.

Internet, WWW and software bots suddenly made significant amount of data available to everyone on a 24/7 basis at near-zero costs; most organizations that keep the data found WWW to be the best place to “store” the data they collect; “**Cloud computing**” made the data collection and storage “asset light” (not needing computer hardware at every place). “**Mobile devices**” and “Smart phones” and their availability universally (nearly four billion users) have made data available nearly free, on a 24/7 basis at the point of consumption. Analysis of data is also practically free of cost that too at “any time, any where” basis, thanks to enormous computing power on the cloud and visualization tools on the mobile devices. In other words, **data is available to practically every one and analysis is available to even lay users, thereby democratizing analysis from analysts to end-users!**

Elements of such democratization started in **niche areas**; for example, networking companies for nearly two decades have been providing “**network analytics**” – packets transmitted, network speed, packet loss, high throughput nodes etc., With the arrival of Web-servers for every organization “**Web-server analytics**” started to be available

nearly a decade back – nodes accessing the particular web-server, time spent on the server, number of times a web-server could not be reached (“404” error), pages that were frequently accessed etc., Perhaps the best known tool in this area is **Google Analytics** that has been improving over the years to the point that marketing folks can use the data to analyse consumer behaviour!

What is happening in the **past couple of years is “full-scale democratization of analytics”**. That explains the explosive growth, almost into hype, of interest in “analytics” that I referred to earlier. The next decade, if not several decades, will truly be the “age of analytics” (perhaps the reason why **Harvard Business Review** (October 2012) termed analytics as “the sexiest job of the 21st Century”!)

Happy reading!

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