The bigger the better

So much data, multiplying by the second, and a never-ending opportunity to watch it grow… The power we can achieve from analyzing big data is endless. The volume of data created by U.S. companies alone each year is enough to fill ten thousand Libraries of Congress. This is a mind-blowing stat, yet there are so many more like it that exemplifies the explosive growth of data today.

By Gilda Foss, Chair, SNIA Analytics & Big Data Committee, NetApp.

Big Data is no longer an industry buzz word or esoteric concept. It’s real, it’s here, and we must address it in a way where we can take advantage of all the analysis goals we can obtain from it. After all, knowledge is power and the more knowledge and insight we have into our data, the more power we achieve.

Analytic can provide companies with hard evidence and insight, where according to McKinsey, a retailer using big data to the full could increase its operating margin by more than 60%. Google’s Eric Schmidt claims that every two days now we create as much information as we did from the dawn of civilization up until 2003. There is nothing else in the industry that is growing as fast as data and we hold the power to learn all that we can from it. The reality is also that Big Data is set to create 1.9 million IT Jobs in U.S. by 2015. Therefore, the opportunity is real and we have the urgent need to back it up with resources and man-power.

Everyone knows that the Internet has changed how businesses operate, people learn, organizations function, and people live their lives. But the relatively newer concept and trend is just as transformative, and this is precisely where Big Data comes into play. Big Data starts with the proven notion that there is a lot more information these days than ever before, and it is being put to astounding new uses.

Big data is obviously distinct from the Internet, although the world-wide-web makes it much easier to collect and share data. It’s also a lot more than just communication. Rather, it is the concept and idea is that we can obtain knowledge from a large body of information that we could not comprehend when we used only smaller amounts.

Bad data or poor data quality costs US businesses $600 billion annually and according to Gartner. Additionally, Big data will drive $352 billion in spending through 2016. Furthermore, Facebook founder, Mark Zuckerberg noted that 1 billion pieces of content are shared via Facebook’s Open Graph daily. We can only imagine what knowledge we can obtain from such data and statistical information. This number is growing each and every day. In fact, there was an estimated 1.8 zettabytes of business data in use back in 2011, which was up by 50 percent from 2010!

The ability to make the world a better place from the analysis of all this vital data is now a reality. Data is only as useful as the analytics we draw from it. There is a huge opportunity for Data Scientists to dig deep and uncover hidden value, obtain insights, find trends, realize patterns, and overall even better our quality of life. New ways of joining datasets have played a large role in generating new insights. Furthermore, innovative approaches to visualizing data often prove vital to the process of creating knowledge. Many of the tools now being developed can be used across disciplines as seemingly different as astronomy and medicine.

It’s been estimated that by 2020, one third of all data will be stored, or will have passed through the cloud, and we will have created 35 zetabytes worth of data. That is an incredible statistic to even fathom. Clearly big data is a widespread topic and getting a lot of media and business attention for all the right reasons. However, all of these statistics and facts emphasize one fact - organizations need people, processes and systems to help them turn raw data into useful information and informed action. Due to the need for uncovering all of this insight, by 2015, 4.4 million IT jobs globally will be created to support big data, generating 1.9 million IT jobs in the United States. Furthermore, 70% of data is created by individuals – but enterprises are responsible for storing and managing 60% of it. That in itself paints a picture of the ‘big’ opportunity at hand.

Realistically, the coming years will decide if these vast zetabytes of data created everyday can be really be utilized to diminish costs and improve operations for all sorts of organizations.

I’ve said in my past publications that the most important step you can take to prepare for big data and everything that it entails is to align with specific business goals. Applying big data techniques to accomplish these goals is the underlying task at hand. Whether it is filtering patterns and webpage logs to understand shopping behavior on an eCommerce site or determining interests and demographics tastes and trends from social media interactions, aligning with your specific goals is the first and foremost task for success. From there you can invest in skills, resources, infrastructure, etc. to achieve those goals.

Technology is ever evolving, and one area where it’s growing in is the ability to collect and analyze huge datasets. It is exactly this trajectory of functionality that will lead to revolutionary advances in business as we know it today. Furthermore, the big data “trend” is rather a reality and not going anywhere as long as we keep tweeting, updating our Facebook status, posting photos and videos, we are creating massive amounts of data. There is tons of data all around us, and by tomorrow it will have grown by 2.5 Exabytes. What’s important is that we take this amazing opportunity in front of us and turn it into business value and information that will help us succeed as a whole.

SNIA’s Analytics & Big Data Committee is dedicated to fostering the growth and success of the Analytics and Big Data and the use of data storage resources and services by analytics and big data applications and toolsets. The committee performs market outreach, education and will determine and document the characteristics of Analytics and Big Data offerings, the impact of Analytics and Big Data on enterprises and analytics and big data computing as well as collecting requirements from Analytics and Big Data vendors and document best practices in this area.

For more information about SNIA’s ABDC, visit http://www.snia.org/forums/abdc/

2. The source for the additional info provided in that same paragraph : http://analyticsweek.com/taaoid-give-big-data-perspective/