

An Overview of Indian Big Data Companies



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Collecting analysis the huge chunk of data collected from various process to identify patterns or extract knowledge which could be useful for activities like planning and change management in real time mode using many unstructured content to generate value can be termed as big data models. Indian IT companies have been evolving and investing in IT and analytics. Most of the analytics and boutique companies are plunging into big data solutions. Some companies though offer only analytical tools and predictive models, position as big data firms. There are so many companies on this segment. The paper presents the four major companies which have become talk of the business starting from its inception. This is a view point paper and the contents are drawn from secondary published resources only.

Keywords: Big Data, Analytics. Musigma, Xurmo, Vizury, Absolutdata

1. Introduction

As the business data has been growing and the hardware cost falling, the companies are leveraging this effect. The concept of big data has taken in a big way except the velocity factor. Big data has been paying the way in big ways. Companies are now promoting their products related to business intelligence and business analytics as big data products. This is due to the hype created by big data terminology.

The firms started eyeing on Big Data solutions. They are spending on an average median of around 25 million according to (TCS Report, 2012). The major banking industries, financial firms, Securities and Insurance companies spent huge on big data tools (TCS, 2012). However it is interesting to note that there are no big return despite being big investments.

The biggest challenge in implementing the Big Data technologies and solutions are lack of integration, lack of sharing of business units across the organizations. There also lack of trust between organizational decision makers, data scientists, consultants, developers and managers. The security challenge is also huge. There is some fear in companies like credit card companies, to ensure the contents in more secured way from many/multiple sources. A leading Indian IT firm found that 80% of respondents are able to get some benefit from big data solutions. Most of the big companies are already spending a sizable amount on getting Big Data solutions. The median spending on Big Data was \$10 million. However the headache still remain on the fact that despite these companies spending huge on such tools and technologies the insights, returns and results are not as expected as it was supposed to be. It is interesting to see in long run that a big spend would pay off a big return or not on these companies.

The paper is a view point paper. The paper explores 4 Indian companies which are into analytics and big data and explains their products and their positioning in offering various services. The paper also compared their big data products and offerings and provide an implication on how big data is viewed and acknowledged by companies.

2. Big Data Companies

As per the NASSCOM report, Indian Analytics market doubled to \$2.3 billion by 2018 (Nasscom, 2014). Report attributed strong analytics capabilities, strong vendor ecosystem, scalability and leadership as the motivation behind India's advantage as a mature ecosystem to promote inland adoption of analytics. Amongst the top 15 Analytics companies, Mu-sigma, Latent View, HCL Technologies, Absolut Data, Fractal Analytics and iCreate were the ones who had unique specializations.

2.1 Mu Sigma

Mu Sigma was started in 2004 by Dhiraj Rajaram. Called as poster boy of Indian analytics industry with the initial investment \$ 200,000 MuSigma's after acquiring its major client Microsoft in 2005 (ET Report, 2014). Rajaram family owns 47%, the company employees own 14%, Sequoia capital owns 16%, and General Atlantic owns 20% the master card and Fidelity investments own 3%. Currently, MuSigma offers domain expertise in ten industry verticals with more than 3500 data scientists which spread across different countries. It has offices in more than 140 companies. Fortune 500 companies are harnessing and retrieving insights from their data due to Mu Sigma's effort.

It offers various Products and services in various categories. The business intelligence and analytics platform provides end-to-end marketing solutions, traffic management systems, forecasting systems. There is a separate platform for inter-intra communications for data scientists that can even connect network of data scientists around the world. The product on MuESP is used to mine very large databases to generate customer value. Mu Sigma caters to text mining and social analytics. Most of its clients are USA based. (MuSigma, 2014). Mu Sigma has strong Natural Language processing models, Econometric models apart from Machine Learning operations. Mu Sigma offers aviation analytics solutions, hospitality and entertainment solutions, tourism enabled analytics, travel analytics (refer Appendix 1).

Due to intense competition in this industry, analytics are applied in all industries for product innovation, market intelligence, better customer engagement, strategic advantage. Mu Sigma is keen in technological advancements in the area of drone analytics and robotics (Rai Archana & Chanchani Madav, 2014)

2.2 Absolut Data

Absolut data is a registered Research and Analytics firm. It operates from San Francisco and has offices in New York, Los Angeles, Bangalore, Gurgaon, London and Dubai. After founding in 2001, it started providing online solutions. Later it diversified into offering analytical solutions and consulting solutions to maximise the return on investment. It made sure that the marketing effectiveness, customer loyalty and reduced customer acquisition cost. It provides readymade solutions on choosing the right market, predicts demand and supply, formulates the demand-price curve, predicts new launches' success and type of launches etc.

The Global analytics market was expected to grow at 12 per cent CAGR from \$96 billion in 2014 to \$121 billion in 2016, while analytics services outsourcing was projected to grow at a CAGR of 14.3 per cent from \$42 billion in 2012 to USD 71 billion in 2016 (Absolutdata, 2014). Worldwide business intelligence (BI) and analytics software totalled \$14.4 billion in 2013, an 8 percent increase from 2012 revenue of \$13.3 billion, according to Gartner. Till 2014, Absolut Data had applied analytics in the marketing domain in assessing the media effectiveness and return on investment to the companies. They brought that by recommending the right promotions to the companies and by appending market research in it to make it more conducive. In 2014, it dedicated an entire practice to the increasing needs of Big Data where it built virtual infrastructure to capture, store and purpose structured and unstructured data (Absolut data, 2014a)

Absolut Data offered a gamut of analytical services which included Campaign Management, Cross selling, Segmentation, Market Mix Modelling etc. Its team of analysts, programmers and scientists used tools such as SAS, SPSS, Qualtrics, Alteryx, Latent Gold, SSI Web, Quantum and Win cross (Information week 2014),(Gartner,2014). Absolut data provides analytics-as-a-service to the clients so that they can use its sophisticated tools and drive their business performance (See Appendix 3). They are not tied to a single methodology which helps them to utilise the right approach to address each business problem.

The Indian Analytics industry as per NASSCOM is growing at 1.2 billion dollar industry at a CAGR of 25% (Nasscom, 2014). This is due to heavy social traffics, people sharing their personal data, opinions etc. This plays a huge market and opportunity for identifying the new products launching and for improvising the products perceptions. It also analyses the data to build intelligence in software. Its proficient techniques in market research and data analytics have made them a reckoning force for companies facing the problem of Brand Management. Absolut data focusses on both large accounts and small firms looking for small analytics solutions. It uses an optimal strategy of utilising both offshore and on-shore specialists for providing its solutions which helps in generating clients globally. It has built a strong expertise in analytics and is recognised by many Fortune 1000 companies across 40 countries. It has also featured in the Deloitte Technology Fast 50 India and Deloitte Asia-Pacific 500 for 2008 and 2009 which has increased its market presence.

2.3 Xurmo Technologies

In 2009 Sridhar Gopalakrishnan established Xurmo Technologies. During this period there were many traditional analytics companies emerged. Hence Xurmo positioned in building reusable apps. Its big Data Funnel creates such a platform for enabling self-learning, hosting and development of predictive applications and several Training Programs. This process ensured Business Analysts and Software Engineers to proactively development such quality applications applications.(Xurmo, 2014).

Though it is still in the early stages of development, Xurmo has caught the eyes of the Indian market. With 20 employees and 5 different customers. It has won many awards. The services offered in sectors like Retail, Banking, Finance, Insurance and e-Commerce Xurmo entered the market with strict confidence. It received an award in top 100 companies at the Red Herring Asia Awards in 2011.

Xurmo's overall business model is based on shipping the products to various partners and then working on various kinds of business models including license-plus-AMC, user-based and monthly contracts. CEO of Xurmo Technologies, regularly contacts top universities in USA for learning how to teach machines to understand queries in a human context. Xurmo is keen on tools and machines to ensure that machines build intelligence in big data software. Xurmo trains data analytics providers on rapid data scanning and big data tools such as R and SaaS; advises corporates on final delivery of big data knowledge mean.

Xurmo has been preparing for another series venture capital funding after two angel rounds. Xurmo is trying to convince clients on why building intelligence in their current business products is necessary to rethink business strategy. The other IT giants like HCL Technologies and Cognizant Technologies have already roped in Xurmo as their technology partner. Xurmo is focusing on making technology and filing multiple patents. In their partnership agreements, the data analytics and consulting part will be handled by its partners. Xurmo's business model lies in shipping the product to partners and working on various business models ranging from license-plus-AMC and user-based to monthly contracts.

2.4 Vizury

Started as a digital marketing company Vizury came into visibility in 2008. The positioning of Vizury is different than others. It helps all the online travel market as well as e-com companies to leverage and maximise their visibility in the online space.

It helps them to realise their digital data in online space. It works closely with online companies to better enhance their brand visibility and be closer to the actual markets. The head office of Vizury is in Bangalore and has a huge global presence in around 27 countries with in short span across varticals e-commerce, travel, healthcare, hospitality etc.

The trick on e-com click based business is very challenging. Identifying wich type of people have high propensity to click ads and analysing such crucial information is very challenging. Vizury works on adhoc querying and uses high standard big data tools such as Pig, HQL, Mapreduce etc.

The business of Vizury model is simple , it works on cost-per-click or cost-per-acquisition. There is also a consulting layer built for statistical modelling. It has a team of 12 data scientists and a 53-member corporate and sales force that works with 20,000 websites. Vizury had raised two rounds of funding; from Inventus and Ojas Venture Partners, a third round of funding worth \$9 million from Nokia Growth Partners. The products are Vizury are provided below (Vizury, 2014).

- Vizury WebConvert, a popular retargeting tool, was used by digital marketing professionals to engage potential online customers in an effective manner. The product had already captured a leading share in the retargeting solution market through its effective customer profile analysis, extensive network accessibility, intelligent bidding capability and unparalleled advertisement customizations. In addition to the product customization based on specific client requests, Vizury also provisioned full customer support as part of its service delivery
- With the rise in the proliferation of mobile smartphones, Vizury saw retargeting offering need for the mobile platform. MobiConvert tool assisted with conversion of those potential customers that had left their mobile websites or applications without making any purchase.
- Vizury AdProspect, a digital advertisement tool, optimized the advertising inventory and assisted marketers with cross utilization of target impressions(See Appendix 2, Appendix 3)

3. Discussion

The important point to be noted that is that who ever is in analytics and intelligence they claim they are in big data solutions. Even the database vendors, spreadsheets and presentation tools everybody claim that they are into big data. Many of the online journals and media forums related to technology augment many confusion by highlighting the most promising companies to watch for big data but in actual many of them are only analytics companies. Big data companies need to be classified based on services, platforms, software, application interfaces etc.(See Appendix 4)

Many post graduate professionals who gain hands on knowledge on machine learning and natural language processing are opening up companies in this space. But the biggest challenges to be noted is that India is so diverse and the world wide data is still more diverse. Diverse data leads to unstructured data. One need an immense amount of knowledge base/research/random algorithmic changes/model trainings to really make an attempt to create a big data space in the data market. It needs a huge learning curve mechanisms to treat the random data and it may take time. Fig 1 provides comparision of four companies on their offerings and their vartical presence.

Comparing MuSigma, Absolut Data, Xurmo and Vizury

	MuSigma	Absolut Data	Xurmo	Vizury
Products/Services	Decision sciences - muLearn, muESP, muMix, muPDNA, muWebfluenz Data sciences - muXo, muHPC, muText	Market research & Business research, Big data, CRM analytics, Marketing effectiveness analytics, Data visualization & reporting,	TURF AI	WebConvert, MobiConvert
Industries presence	BFSI, Airline, Hospitality & Entertainment, Retail, Consumer products, Pharmaceuticals, Healthcare, Technology, Telecom	Consulting, Telecom and Technology, Banking and Financial sevicees, Pharmaceuticals, Entertainment and Advertisement, Automobile, Consumer packaged goods, Retail, Hospitality	Self-service platform - can be used in any industry	Financial services, Flights, E-commerce, Automobiles, online travel

The approach towards big data is classified in two ways – companies developing their own big data products and platforms to provide solutions. The second being companies building expertise in the industry and analytics and thus provide solutions using tools available in the market. Clearly, all the companies realise and leverage the importance of customer data and building intelligence and insights in that data.

Big Data has enabled organizations to capture and analyse huge amount of information and derive meaningful correlations enabling firms in spotting business trends, determining quality of research, prevention of diseases, linking legal citations, combating crime, and determining real-time roadway traffic conditions. However, Big Data brings with it its own set of problems. The sheer volume and variety of data one has to go through in order to do this has raised the need for innovative approaches to data management. More and more firms with legacy systems in place are facing issues around managing this data in terms of capture, assimilation, storage, organizing, searching, sharing, rep Most enterprises today maintain their own data warehouses. With the huge quantities of data coming in, the data ware house are rarely able to maintain a simple storage environment. They become cluttered with multiple variety of data not suitable for use for any particular task. The biggest disadvantage of this cluttering is that regular analytics queries take much much longer to execute sorting through this data.

Although, some of big data storage open sources like Hadoop, Map reduce are open-source and hence available free of cost, the infrastructure required for implementation constitutes a large number of parallel servers and storage units used extensively for executing the analysis. The cost of operating and maintaining this infrastructure along with the salaries of the Hadoop developers, which typically exceed \$200,000, makes the complete activity of Big Data Analytics a very costly affair. Open-source software and projects are developed with no provision of incentives and hence are generally of questionable quality. Most such software cannot be used beyond the scope of the very specific activities they were designed for and are deemed unusable for any other functionalities. Hadoop was designed specifically to enable the distributed Map Reduce processing on low-cost hardware. While Hadoop is good for executing Map Reduce processing for distributed data, it is not usable for highly interactive analytics.

4. Conclusion

Big Data is a buzz word and everybody into analytics are using this term. In the past many companies were working on data management and master data management. Due to many tools and techniques emerging, the companies are entering into data sciences. The emergency of unstructured web data is a huge impetus factor for big data.

Having observed that, in the past two decades the rapid growth in information technologies has led to a surge in data generation and consumption like never before. The above mentioned companies with legacy systems in place are facing issues around managing this data in terms of capture, assimilation, storage, organizing, searching, sharing, replicating, analysing and visualization.

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6. Appendix

Appendix 1: Musigma Horizontal And Vertical Expertise



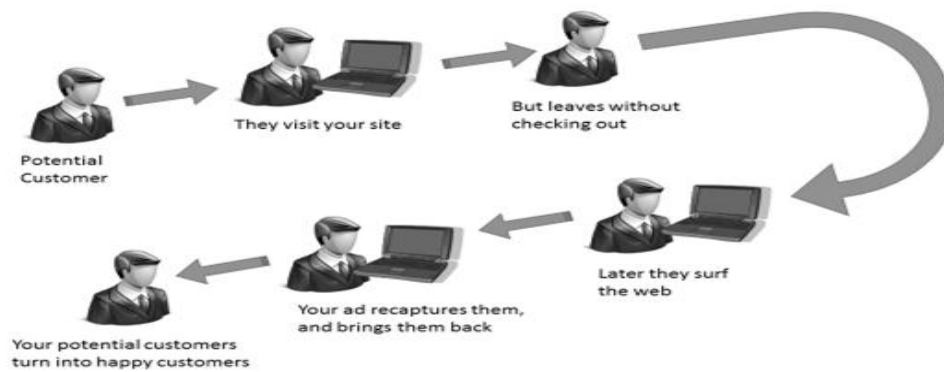
Source: MuSigma website, Solutions, <http://www.mu-sigma.com/analytics/solutions/overview.html> (accessed August 28, 2014)

Appendix 2: List of Clients of Vizury

Clients	Industry	Country
Abdul Latif Jameel	Financial Services	Saudi Arabia
Jet Airways	Airline	India
Virgin Australia	Airline	Australia
Yintai.com	eCommerce	China
HomeShop18	eCommerce	India
Firstcry.com	eCommerce	India
The Ionic	eCommerce	Australia
Netshoes	eCommerce	North America
Sony	eCommerce	Australia
Jabong.com	eCommerce	India
Tmart	eCommerce	China
TATA Motors	Automobile	India
Viajanet	Online Travel Agency	Latin America

Source: Compiled by author

Appendix 3: How Retargeting Works in Vizury



Source: Compiled by Author

Appendix: Top 15 Analytics Companies in India

Company	Specialization
IBM Analytics	General-served Broad areas
Mu-sigma	Sales, Marketing, Supply Chain, and Risk Analytics
LatentView	Marketing, Risk , Customer Management
HCL Technologies	Marketing, Risk
Accenture	General-served Broad areas
Genpact Analytics	General-served Broad areas
Cognizant Analytics	General-served Broad areas
TCS Analytics	General-served Broad areas
Wipro Analytics	General-served Broad areas
Mckinsey Analytics Knowledge	General-served Broad areas
Deloitte	General-served Broad areas
PWC Analytics	General-served Broad areas
AbsolutData	Consumer Behaviour Analytics
Fractal Analytics	Customer Loyalty, Operations
iCreate	Banking Analytics

Source: Compiled by Author from <http://gigaom.com/2011/10/25/ibms-steve-mills-6b-in-analytics-revenue-by-2015/>