Introduction

SMEs are using big data to drive growth

Key Trends

Geographies Served

Sector Type

Analytics Industry by Cities

Analytics Professionals in India

Conclusion
INTRODUCTION

With an increase in data generation at individual level and at organizational level, the need for tools that can analyze these data has only increased. Deployment of analytics is becoming critical to a business and from performing simple tasks to sophisticated ones, they are relying extensively on analytics. It can even be said that, an increasing efficiency of tools and products specializing in data processing has resulted in growth of business analytics.

Either way around, there has been an extensive increase in the overall revenue generated by these companies, at an estimated $2.03 Billion annually and 23.8% of CAGR. India has also been making headways in analytics export in the form of various analytics services. With USA and UK being the major market for analytics export for India, its domestic market serves a total of 4% of analytics revenues.

Given the numbers, India easily ranks as one of the top 10 destinations for analytics and the market is estimated to grow even further. With 600+ analytics firms, and more than 50% of it being startups, India us emerging as a growing hub for analytics solutions, hence giving a major boost to the industry.

Presenting a picture of the overall analytics industry in India, Analytics India Magazine in association with AnalytixLabs brings its annual study titled "Analytics Industry Study-2017", which represents the key trends in the industry. It covers all the aspect of the analytics industry such as the major geographies served, analytics market by sector type, by cities, analytics professionals etc. The study is a result of extensive primary and secondary research conducted over a duration of two months.
SMEs ARE USING BIG DATA TO DRIVE GROWTH WITH INCREASED ADOPTION OF BIG DATA TECH

Big data isn’t just for big enterprises anymore. Small and medium sized enterprises (SMEs) have also become active adopters of ICT. In fact, over the last couple of years, small and mid-size Indian companies have seen more big data deployments than the big competitors.

According to our study, the Big Data industry in India is expected to almost double by 2020. There is an increased adoption of SMAC amongst small and medium business verticals, owing to the increased volume of data and customer interactions. Our report pegs that the big data industry is estimated to be $2.03 billion annually in revenues and will grow at a healthy rate of 23.8% CAGR.

The data boom in India isn’t just limited to big enterprises, the growth of big data startups/technology vendors is helping SMEs in scaling up infrastructure capabilities and driving insights from data. Analytics India Industry Study indicates
that the India domestic market serves as a significant opportunity, with almost 4% of analytics revenues coming for Indian firms.

Also, the increased availability of accessible, cheap data centres delivered by cloud vendors, has brought down the costs of upfront investment for small businesses, thereby reducing the market entry barrier. Now, it is the question of choosing the right analytics vendors that fits the bill for small businesses. As more and more vendors offer competitive data-driven capabilities, what’s crucial for startups is getting started with the right infrastructure and build for scaling.

**BIG DATA IMPACT IN INDIA**

And behind the successful adoption of big data analytics (BDA) in SMBs is the exponential growth of market. According to our research, out of the annual inflow to analytics industry – almost 12% can be attributed to advanced analytics/predictive modeling and Data science. And a sizeable 24% can be attributed to big data. The rise of BDA and robust analytics tools is helping small businesses accomplish their goals in a short span of time, see a higher ROI and ensure continued business success.

**BIG DATA MEANS BIG BUSINESS FOR SMBs**

Even though SMBs are an early stage of big data adoption, with most small enterprises dabbling in the exploratory stage, businesses have started showing a greater interest in getting analytics platform off the ground to reap the desired outcome. Most small and mid-size enterprises are now viewing big data more as a strategic initiative and a central IT function.

**HERE ARE SOME OF THE RECENT BIG DATA DEPLOYMENTS THAT MADE HEADLINES:**

a) Fashion doyenne Ritu Kumar’s The Label team up with Manthan for advanced retail analytics:

Indian fashion industry is usually regarded as a laggard in adopting technology solutions, but in a first, Ritu Kumar’s The Label will be using Bangalore-based analytics vendor Manthan’s ready-to-use solution that provides advanced algorithms out of the box, eliminating the need for business users to rely on a team of data scientists and IT for detailed analysis. Manthan’s Advanced Retail Analytics will enable the fashion business to accurately forecast demand for new SKUs, identify opportunity areas in their existing assortment range and optimize their in-season allocation and delivery plans. The advanced analytics solution will provide granular insights that help in introducing the right products based on customer preferences, optimal in-season allocation across channels based on key attributes and insights to refine their delivery strategy.
b) SAP is betting big on SME sector in India:
With the recent GST move, the world’s leading enterprise solution provider is making a huge play in the SME marketplace. Krishnan Chatterjee, head (marketing), Indian sub-continent of SAP India, divulged that SME units make up 80% of the client base in India as it rolled out the GST software built in India for SMEs. Over the years, SAP has emerged as a dominant player in the SME ecosystem by providing the right big data solutions to improve efficiency, cut costs and boost sales.

BARRIERS TO ADOPTION OF BIG DATA ANALYTICS

Ever wondered why so many small and mid-size businesses fail in a successful adoption of analytics. According to research, some of the key barriers limiting big data adoption is a lack of successful use cases, a lack of availability of packaged solutions, a limited understanding of technology stack and most importantly a lack of data-centric culture. Other factors include an acute shortage of in-house talent and the cost of implementing solutions. The other key challenge in big data tech is disparate data sources, high costs and infrastructure and concerns around Rol. Traditionally, most small and mid-size enterprises rely on intuition rather than data to drive decisions around pricing strategy or driving customer acquisition.

Here’s a round-up of key limitations to big data adoption:

- Concerns around the cost and complexity of big data solutions
- Lack of understanding of technology stack
- Lack of a data-centric culture is also a key challenge
- Senior management grapples to justify high investment & Rol
- Limited number of uses cases available in the Indian SME ecosystem

HOW TO WIN OVER SMBs IN THE BIG DATA MARKET

One of the key challenges for analytics vendors is to develop customizable software for SMEs that is easy to deploy and can be easily configured. Subscription based pricing models can provide flexibility to customers and help avoid vendor lock-in and lower entry barrier risk. To benefit from big data advances, small and mid-size companies should adopt a more modernized approach to IT, pivoting towards a cloud-powered platform to scale effectively. Also, before signing up for a big data analytics solution, businesses must learn how to identify the right data analytics tool.

Case in point – self-service analytics tool enables non-tech users to find patterns and drill insights and create beautiful dashboards while ETL tools help extract data at high speed for analysis. Some businesses may only require dashboard tools to present insights to management or skim over what-if scenarios through pie-charts and bar charts. However, one of the key challenges for analytics vendors is to create flexible tools, keeping the end user in mind. Also, the DIY analytics and forecasting solutions should support different types of data.
**KEY TRENDS**

- Analytics/ Data science/ Big Data industry in India currently estimated to be **$2.03 Billion** annually in revenues, growing at a healthy rate of **23.8% CAGR**.

- Of the annual inflow to analytics industry – almost **12%** can be attributed to advanced analytics/ predictive modeling and Data science.

- A sizeable **24%** can be attributed to big data.

- Analytics/ Data science/ Big Data industry in India is expected to almost **double** by 2020.
GEOGRAPHIES SERVED

- In terms of geographies served, almost 60% of analytics revenues in India come from analytics exports to USA.
- UK comes on a distant second at 8.4% of revenues.
- Indian domestic market serves as a significant opportunity, with almost 4% of analytics revenues coming for Indian firms.

TOP 20 COUNTRIES BY ANALYTICS REVENUE IN INDIA, IN $MM.

<table>
<thead>
<tr>
<th>Country</th>
<th>Revenue Generated (in $MM)</th>
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<tbody>
<tr>
<td>UAE 8.4</td>
<td></td>
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<tr>
<td>Malasiya 9.6</td>
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<tr>
<td>Hungary 10.5</td>
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<td>Romania 20.1</td>
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<td>Philippines 21.0</td>
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<td>Australia 109.0</td>
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<td>UK 169.6</td>
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60% OF ANALYTICS REVENUES FROM USA
8.4% OF REVENUES FROM INDIAN DOMESTIC MARKET
In terms of Sector type, Finance & Banking continues to be the largest sector being served by analytics in India. Overall, 37% or $756 Million in revenues to analytics industry in India comes from Finance & Banking.

Marketing & advertising comes second at 26%, followed by E-commerce sector at 15% of analytics revenues in India.

In comparison to the last year, Pharma & Healthcare saw the biggest jump in analytics revenues, from $103MM to $137MM, a jump of 34%.

Finance & Banking saw an increase of 31% vis-à-vis last year.
28% or $565 Million in market size for analytics industry comes from Delhi/NCR. This is closely followed by Bengaluru at 27%.

The highest increase in year on year analytics revenues for an Indian city comes from Hyderabad, from $134MM in 2016 to $178 this year; an increase of 33%.
Work Experience

- The average work experience of analytics professionals in India is **7.7 years**; up from 7.2 years from last year.
- Around **12,000 freshers** were added to analytics workforce in India this year; up from 8,500 freshers last year.
- Almost **42%** analytics professionals in India have a work experience less than 5 years, down from **46%** last year.
- Last year, analytics professionals with more than 10 years experience increased by more than **30,000**.

### Work Experience

<table>
<thead>
<tr>
<th>Work Experience</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>More than 10 Years</td>
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<td>6 to 10 Years</td>
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<td>3 to 5 Years</td>
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<td>Less than 1 Years</td>
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Percentage of Analytics Professionals
Top 10 universities/schools that analytics professionals in India graduate from are:

- University of Mumbai
- Delhi University
- Kendriya Vidyalaya
- University of Pune
- Indian Institute of Management, Calcutta
- Indian Institute of Management Bangalore
- Indira Gandhi National Open University
- Indian School of Business
- SVKM’s Narsee Monjee Institute of Management Studies
- Indian Institute of Technology, Bombay

Almost 18% of analytics professionals in India graduate from these 10 universities/Schools.

-57% of analytics professionals have a Master’s/Post Graduation degree, same as a year earlier.

-3% of analytics professionals in India hold a PhD or Doctorate degree, again similar to a year back.

Women participation in analytics workforce remains low – just 24% of analytics professionals in India are women.

Almost 40% of analytics professionals in India are employed with large sized companies – with more than 10K total employee base.

Mid size organizations (total employee base in range of 200-10K) employ 33% of all analytics professionals in India.

Startups (less than 200 employee base) employ 27% of analytics professionals in India.

Startups have significant contribution to overall output of analytics in India. Even though small in absolute term, the overall impact is increasing significantly with small to mid size organizations in India.
The current situation of analytics industry presents positive picture as is suggested by the study. The numbers are suggestive of the fact that India is emerging as one of the top destinations for analytics with everything from analytics education to job opportunities showcasing satisfactory numbers.

The study suggested that, of the annual inflow to analytics industry, almost 12% can be attributed to advanced analytics, predictive modeling and data science. It also says that analytics industry is expected to almost double by 2020, which would mean an increased opportunity for professionals dwelling in this space.

In terms of Sector type, Finance & Banking continues to be the largest sector being served by analytics in India with close to $756 Million in revenues coming for these sectors. It amounts in all to 37% of total revenues. Other sectors that contribute a major share in analytics industry are marketing, e-commerce, retail, telecom etc.

It is not surprising to see Bangalore being a leading revenue generator in the space as it houses most number of industries. Providing an opportunity from fresher to experienced professionals in the space, analytics industry turns out to be pretty decent in terms of hiring too.

The study overall is representative of a booming analytics industry in India and as the numbers suggests, it is expected to grow sizably in the future too.
Founded in 2012, Analytics India Magazine has since been dedicated to passionately championing and promoting the analytics ecosystem in India. It chronicles the technological progress in the space of analytics, artificial intelligence, data science, big data by highlighting the innovations, players in the field, challenges shaping the future, through the promotion and discussion of ideas and thoughts by smart, ardent, action-oriented individuals who want to change the world.

Analytics India Magazine has been a pre-eminent source of news, information and analysis for the Indian analytics ecosystem by covering opinions, analysis and insights on the key breakthroughs and developments in data-driven technologies as well as highlighting how they are being leverages for future impact.

With a dedicated editorial staff and a network of more than 250 expert contributors, AIM’s stories are targeted at futurists, AI researchers, Data science entrepreneurs, analytics aficionados and technophiles.

AnalytixLabs pioneers in analytics training since 2011 and as one of the first analytics training institutes, it is widely acclaimed and known for high quality training by industry experts themselves. After establishing ourselves as the top analytics training institute in Delhi NCR, they slowly and steadily progressed to earn the same reputation pan India based on their stellar record and student satisfaction. Their students are placed in leading companies across industries like Accenture, American Express, AbsolutData, Axtria, Bank of America and McKinsey. They are focused at helping their clients develop skills in basic and advanced analytics to enable them to emerge as “Industry Ready” professionals and enhance their career opportunities. It was co-founded by Sumeet Bansal, Ankita Gupta and Chandra Mouli.