Pulse.

May 2014

Business Analytics to Help Micro, Small & Medium Enterprises (MSMEs) Spark Innovation & Gain Competitive Advantage

Highlight

MSME sector plays a pivotal role in the development of India's economy. The sector is largely unorganised with more than 94% of the units being unregistered. The government has formulated a number of policies for the development of MSME sector in the field of credit, technological up gradation, marketing, entrepreneurship development, etc.

Though the sector has shown a growth trend in terms of increase in the number of MSME units, investment in fixed assets and employment generation yet there have been a number of challenges that have led to various inefficiencies of the units at various decision making levels. Currently the need of the hour for this sector is to get itself familiar and geared with the data oriented information technology and use the same in the development and expansion of the companies. Most MSME business owners make decisions based on a best guess basis or on their perception of business environment as they do not see the value of investment in business analytics tools.

For the MSME operating in an intensely competitive environment, the ability to access and process information with speed and accuracy is critical. Business Analytics (BA) tools are just as valuable for small business as for large ones. The solutions provide capabilities that help companies ensure information integrity, transform decision-making, and optimize business performance. Whether in time of an economic downtrend or an upswing, it is equally important for the MSME to efficiently aggregate information from a wide variety of sources and consolidate them to derive useful insights and transform the business. Ultimately, making effective use of analytics will be the hallmark of the well-managed MSME, showing that it is an enterprise that can always effectively tackle crucial business questions and thereby, ensuring timely, accurate and informed business decisions.

Background

Indian MSMEs Sector Overview

India's MSME sector is considered the backbone of the economy, contributing 45% of the industrial output, 40% of country's total exports, employing 60 million people, creating 1.3 million jobs every year and producing more than 8,000 quality products for the domestic and international markets.

According to the Ministry of Micro, Small and Medium Enterprises, the number of MSME units in India has grown at a CAGR of 5.4% during FY07 – FY12, and stood at 44.7 million at the end of FY12. The investment in these units rose at a CAGR of 7.8% during the same period. Strong growth in total investment in MSMEs is indicative of their expanding footprint and growing importance in India's economy.

MSMEs are diverse in terms of size, products and services offered, turnover and technology adoption. The spectrum is broad. On one end are high-growth enterprises in developed sectors, such as textiles and garments, auto components, health care, education and telecom equipment. At the other end are sub-contractors and the more slow-growing informal, small retail and unorganised sector, such as village and cottage industrial units. Remarkably, more than 24.5 million (94%) of MSMEs are unregistered.

Indian MSMEs have moved up the value chain from manufacture of simple goods to sophisticated products. They have also entered the services sector. MSMEs are now faced with global competition and to remain profitable in this business environment it is imperative for them to adopt newer technology and have a more forward looking approach towards their business.

Challenges Faced by MSMEs in India

It has been observed that the MSME lack the abilities of the larger enterprises to deal with economic and functional issues. The challenges and issues faced by MSMEs at different stages of their lifecycle are of a diverse nature and hence a substantial amount of time and energy of the MSME entrepreneur is spent on overcoming these challenges. Such a trend needs to be reversed as it is inimical to the growth of these units & is not sustainable in the long run. An ecosystem needs to be built around MSMEs to enable and assist them in delivering better performance. With the globalisation of the economy, there is a changed notion of manufacturing, productivity and competitiveness. The flexibility in the production process and ability to deliver differentiated product variety with higher quality has helped progressive MSMEs in creating a niche for themselves. Some of the major challenges faced by MSMEs in India include:

Absence of Adequate and Timely Finance and High Cost of Borrowing: Lack of adequate finance from banks and other formal sources together with absence of transparency regarding their financial condition is proving to be a stumbling block in growth of MSMEs in India. While rising input costs are eating up their profits, high costs of borrowing have worsened the situation for them. Primary reason for the cost of credit remaining high for MSMEs is high-risk perception among banks pertaining to this sector. *Technology solutions such as business analytics tools can play a pivot role in assisting small business with better financial management and maintaining customer relationship. Adopting these methods/ tools would in turn help in generating a heightened confidence among lenders regarding transparency, sound business goals and well-developed business plans in respect of such units.*

Inadequate Marketing and Branding Strategy: Marketing and branding has been one of the key areas of concern for MSMEs mainly due to unavailability of finance and lack of awareness regarding appropriate marketing and branding strategy. Most of the MSMEs fail to get enough buyers or generate enough enquiries because of their inability to develop Unique Selling Point (USP) for their products or services. Their lack of market awareness and difficulty in identifying the USP of their product and service makes it difficult for them to understand their target audience. Moreover, their area of operation is largely limited to a regional target audience. Very few MSMEs explore out of their regional markets and make efforts to build a two-way communication channel across farther markets. *The market unawareness and delay in the information gathering due to the greater physical distance barrier is one challenge that can be easily overcome by various tools offered by BA.*

Delayed Payments: A major concern for MSMEs that has a bearing on their finances is the long time taken by larger corporates in making payments for items procured from MSMEs, especially from their ancillary units. Delayed payments by large enterprises tend to raise sickness of MSMEs by reducing the working capital available with a unit for productive use. Timely payments from customers will help MSMEs in reducing their working capital requirements leading to lower interest costs, improved profitability and a positive impact on the long-term health and sustainability of India's MSME sector. Given the limited credit enjoyed by MSMEs from the financial institutions, the financial costs for availing a loan are quite high for an MSME. *BA helps to monitor collections processes, to show what customers buy and how they pay, enabling managers to identify overdue balances and other receivables bottlenecks. It also enables the companies to improve their recovery rate.*

Non-Availability of Suitable/ Appropriate Technology: MSMEs need to be technology literate to compete effectively, in the backdrop of increased competition in a global environment and the uncertainty generated by business cycles and more particularly due to factors such as global downturn in the recent years. MSMEs will have to continuously incorporate latest technology into their production processes as well as in their marketing and management functions to cut costs, gain efficiency, and achieve economies of scale. However, the cost associated with the implementation or adoption of technology, installing and maintaining information systems, and maintaining skilled workforce to operate the technology are high and as such would be a challenge for many small firms. Nurturing competitiveness among MSMEs by helping them to adopt newer technology will improve the productivity across the value chain and create a more forward thinking and responsive sector.

Increasing Competition: MSMEs face intense competition from the large domestic firms and multinationals armed with improved technology, financial strength, managerial ability, skilled workers, marketing skills, better product quality, and wide range of products. The small firms find it difficult to maintain their existence in such conditions. As the Indian economy opens up to global competition, MSMEs must find ways to innovate to succeed in this business environment. *BA tools help in the creation of new revenue potential and enhancement of customers' convenience through value-added services. It helps in determining future buying patterns and makes it easier to prepare for seasonal demand fluctuations.*

Non Availability of Skilled Manpower and Increasing Labour Cost: Large firms pay higher remuneration and employ skilled workers. The MSMEs have to operate with unskilled or semi-skilled workers. Thus, the MSMEs suffer from low managerial capabilities, higher inefficiencies in decision making and lower productivity levels at the factory or the field levels. Moreover, due to the small scale of operations, skill development and continuous training of the manpower is difficult for the MSMEs. There is a need for the government to intervene and create a higher supply of more skill oriented manpower than just generalised degree holders. Having an appropriate quantity and mix of full and part time employees affects labour cost per hour and labour efficiency. *Analytics based tools enable companies to capture complete and accurate snapshot of their employee labour activities and help in decreasing labour costs, improving workforce efficiently and managing talent effectively.*

Business Analytics Creating Competitive MSMEs

BUSINESS ANALYTICS is the use of tools and techniques, such as data mining, pattern matching, data visualization and predictive modeling, for the continuous methodological exploration of past business data to develop new insights about the business performance and facilitate business planning. The primary goal of any analytics exercise in a company is to inform the management about the health of the business, at times forewarn of impending problems/opportunities and throw light on what to best expect in the medium-term future. These tools help identify and develop new opportunities, providing companies with competitive market advantage and long-term stability.

Business Analytics Value Chain				
Data Collection	Data Integration, Validation & Storage	Data Analysis & Reporting	Advanced Analytics	Presentation & action
Data Collection from Primary Source	• Integrating Data from multiple sources • Data Warehousing • Data Validation & Cleansing	• Ad-hoc Query • Statistical Modeling • MIS Reporting • Structured Reports • Customised Dashboards	• Predictive Analytics • Risk Analytics • Sales & Marketing Analytics	• Analysing and Interpreting Results • Consulting Services to Clients • Operational or Tactical Decision Making

By 2015, the analytics market in India is expected to hold 21% of the overall Indian KPO market opportunities of `336 billion. Although this market has been in existence since early 2000, the exponential growth in data generation, significant decrease in data storage cost and increased need of companies to make decisions based on actionable insights, have increased the demand for data analytics services.

Analytics Industry of India

✓ Current Size of the Indian Analytics Market – `22.5 bn
✓ Number of companies operating in this segment in India – More than 500
✓ Expected Indian Analytics Market by 2015 – `69 bn

MSMEs are expected to contribute significantly to this growth of the BA sector business. The appetite for intelligence information among MSMEs is definitely on the rise. Indian MSMEs are facing a greater need to take faster strategic decisions based on real-time analysis from large volumes of volatile and diverse data. They are

increasingly turning toward such tools, to drive themselves on a fast growth track. At present, the penetration of BA among SMEs is minimal. Earlier, major players in the analytics industry had been concentrating on the large sized industries for a long time as a result of which, the scale of most of the common analytics products available in the market is either too large or unaffordable for MSMEs. The situation has since changed due to the advent of analytics products focusing the MSME market. The advent of such products has helped in significantly decreasing the cost of adoption of analytics products for MSMEs.

Total BA usage among the internet dependent SMEs is 13.2%; however with aspirations of offering greater business value to the customers and to deal with domestic and global competitive challenges, the MSMEs in India are turning to true business assessment and performance management solutions. Forecasting, business analytics and similar tools are vital for them in order to manage the amount of data generated – it grows at an exponential rate with the accumulation of all-types of data - financial & accounting data, sales & marketing data, production data, HR related data, etc. It is vital not only to possess data; but to be able to analyse it with a view to gain business insight. Unfortunately, this is one task that many MSMEs are not equipped do. And this is precisely the reason for the adoption of BA tools by them.

Figure 1: Benefits of Using Analytics Based Tools

BA tools include scorecards, dashboards, analytics, data mining and reports with drill downs. BA typically combines high-level data from each department in-order to gain an understanding of how the organization is functioning as a whole. BA helps in identifying the critical strength and weakness of the business and presents ways to increase efficiency and enhance revenue. It also enables MSMEs to estimate how much investment can be put to use and gain control over inventory investment. BA helps in providing solution to some critical issues:

- How to decide product pricing and discounts/ deals
- How much to reorder of an existing product line
- How can the inventory levels be optimised for maximum profit
- How to track the most profitable transaction
- Enhance new product introductions by understanding purchasing trends and better forecasting how different markets and customer segments will respond

Business analytics has become an important requirement for companies that want to be competitive—and stay that way. While certain kinds of advanced analytics have been on the market for decades, adoption is finally increasing for a number of reasons, including the economic climate, the availability of computing power, the growth in the amount and variety of data, and a greater appreciation of the power of analytics. The companies are moving towards more forward-looking analytics in order to increase operational efficiency, reduce fraud and waste, deliver incisive marketing campaigns, improve financial outcomes, and predict business risk.

Analysis

Business analytics tools are a key to transformation success—but MSMEs struggle with data accuracy and quality

The need of the hour is to empower the MSME sector so that it is able to take its rightful place as the growth engine of the economy. In order to achieve this target it is necessary to support the MSMEs, educate and empower them to make optimum utilization of the resources. The MSMEs need to be educated and informed of the latest developments taking place globally and be helped to acquire skills necessary to keep pace with the global developments.

In order to move up the value chain and increase their penetration, it is fundamental that quality and quantity of relevant data is coming from a structured data source. Most MSMEs keep their data in an unstructured format which cannot be used effectively. Database for the large enterprises which can be used for analytics is available at several places in a structured way. For MSMEs, this database is not available. Hence, rated enterprises play a greater role in compiling such granular data which could lead to better analysis of this sector. Rating agencies garner a lot of data while assigning rating to companies and this data is stored in their database, in a structured format and is readily accessible, which can be later used for the benefits of MSMEs. With the help of BA tools, this database created by rating agencies can be integrated with the company specific data to provide MSME users with a complete view of their business performance.

Business Analytics is emerging as a tool in helping MSMEs improve their performance and gain real time insight about the business. MSMEs can vastly improve the effectiveness and accuracy of business planning without implementing a large and expensive system. MSMEs must seriously consider these analytics based tools which would help improve their sales, optimize inventory, understand customer and product behavior patterns, etc with a view to build up more efficient, robust, progressive & profitable business.

External References

- http://www.iitk.ac.in/ime/MBA_IITK/avantgarde/?p=1165

- http://analyticsindiamag.com/category/research/

- **Creating Competitive MSMEs- Confederation of Indian Industry**
  http://www.cii.in/webcms/Upload/Creating%20Competitive%20SMEs.pdf

- **Problems and Prospects Of Micro, Small And Medium Enterprises (MSMEs) In India In The Era Of Globalization**
  http://www.rtc.bt/Conference/2012_10_15/6-RajibLahiri-MSMEs_in_India.pdf

- **Annual Report- Ministry of Micro, Small & Medium Enterprises**
  http://msme.gov.in/WriteReadData/DocumentFile/ANNUALREPORT-MSME-2012-13P.pdf

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