



# Analyzing the impact business analytics can have on Indian SME's supply chain performance

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## Research Objective

- Small and Medium Enterprises play a vital role in the growth of Indian economy due to its high level of flexibility, innovation and dynamism. However they are facing immense competition internally and externally.
- Supply Chain plays a vital role in fulfilling demand, sourcing, procurement, production and logistics process in these SME.
- This paper studies the impact Business Analytics (BA) can have in Indian SME's in terms of performance and correctness of four key areas of SCM namely Plan, Source, Make and Deliver in the decision making traits so as to perform better in the market

## Literature review

SME contribution to the Indian economy is enormous constituting about 45% of total industrial output, a 40% share in the exports along with about 1.4 million jobs annually . On the other hand the expectations from them is too high, with customers demanding quality products at low cost and the global market giving a tough competition.

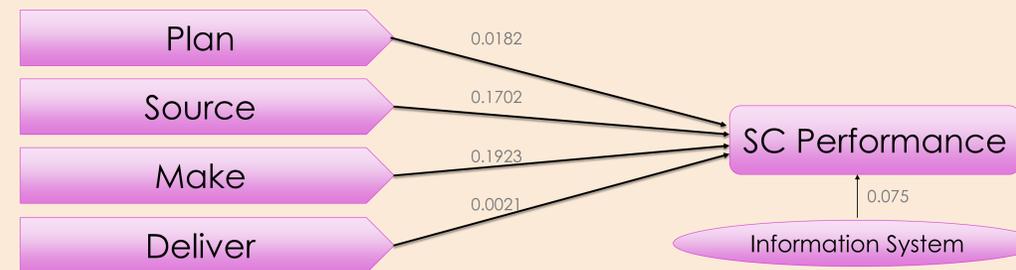
Supply Chain network involves a huge base starting from supplier, manufacturer themselves, retailer, customer that actually makes the ends meet between the producer and consumer through various channels of production, finance, distribution, etc. Supply chain management plays a crucial role in altering Indian SME performance.

The contextual meaning of Business Analytics (BA) as per this paper is the use of various analytic practices to solve problems and answer interrogations related to Supply chain Management

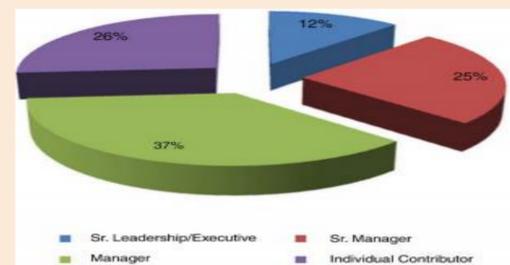
## Research gap

Though a number of studies have been carried out to understand the impact of BA in SCM, no studies have been done on Indian context pertaining specially to Small scale industries. This paper fills that gap by analyzing the impact, business analytics can have on Indian SME's supply chain performance

## Methodology



- The survey included questions about the key SC decision practices and their level of use in the supply chain.
- The discussions and interviews were structured around the SCOR Model.
- The Information Systems Support construct was represented by self-assessment measures directly asking whether the "information systems currently support" the overall supply chain processes, the order commitment process, distribution management, the Make process, the Source process and the demand management process.



## Analysis

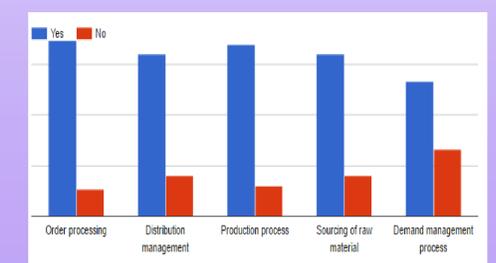
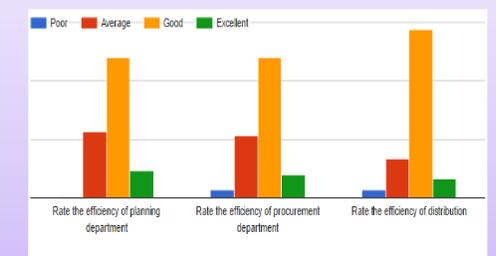
Structural equation modeling (Partial Least Squares; PLS) was used to test the hypothetical model and evaluate the influence of the moderators over the variables.

The R2 coefficient is 0.667, which demonstrates that the indicators of analytical capabilities were able to explain 66.7% of the variability in the performance results.

## Conclusion

The research results show that the use of BA in critical process areas can affect a SC's performance of SMEs. The analytical capabilities can better guide the exclusively human decisions and provide automated decisions in some tasks in organizations.

Companies may not yet be sufficiently advanced in their use of BA enough; possibly the use of BA in the Deliver area has a greater impact on performance after a certain level has been reached in other three areas (Plan, Source, and Make).



## Limitation And Future scope

the sample size was only 150 and taken randomly. Hence the results may not be applicable uniformly to all SMEs across India but most likely represent the major population. This difference is probably because of the unique factors these SME adopt to according to their region

Future research could include case studies to acquire a more comprehensive view of how BA impact on various areas of performance.