

Impact of In-House Implementation of Business Intelligence with Reference to Industries in ITES sector in & around Pune

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ABSTRACT

*Today's digital era and competitive edge is highly influenced by the **DATA**. The raw data when processed and handled properly creates the meaningful information. In any Business Organization information acts as one of its vital assets which cover all the three levels i.e from operational to strategic. In today's data driven world, data is at the heart of every organization. Business Intelligence (BI) is a skilled technique of processing and transforming the raw data into meaningful information thereby producing new insights and supporting the high-end decision-making to yield real business benefits. Sustainability & growth of Business can be achieved through Effective and Efficient In-House Implementation of Business Intelligence. This paper highlights the impacts that in-house implementation of BI has made on various ITES sector industries (Banking, Insurance, telecom and Healthcare) in and around Pune. The findings reveal how BI enhances the Sustainability and Growth of a Business by affecting its key areas. The respondents are the CIO's / CIU's (Chief Information Officer's / User's) who rely heavily on the data for Business Processes to function properly. Based on the findings a suitable model has been proposed by the researcher.*

INTRODUCTION

Competitive edge with increasing cost effectiveness, quality and selection, service and promptness of delivery of various services offered by the organization plays an important role. Constant and effective technological innovations with staff development cause the competition to intensify. All these requirements impose the need for organizational transformation, where the entire processes and organization structure are changed with appropriate Business Intelligence practices.

Any Business processes can be characterized into three major elements:

- **Inputs:**
 - Customer inquiries or end-user inputs, requirements

- **Processing of the data:**
 - The data usually goes through several stages and processes with innovative techniques, and
- **Outcome :**
 - The delivery result as expected by the organization and its shareholder.

The challenging part of any process is the appropriate processing of information. The fundamental redesigning and refining of business processes is performed to achieve remarkable improvements in cost, quality, service and speed with the innovative Business Intelligence techniques. Each Process is a structured, measured set of activities designed to produce a specified output for a particular end-user as per the demands and requirements. It implies a strong emphasis for the work flow within an organization.

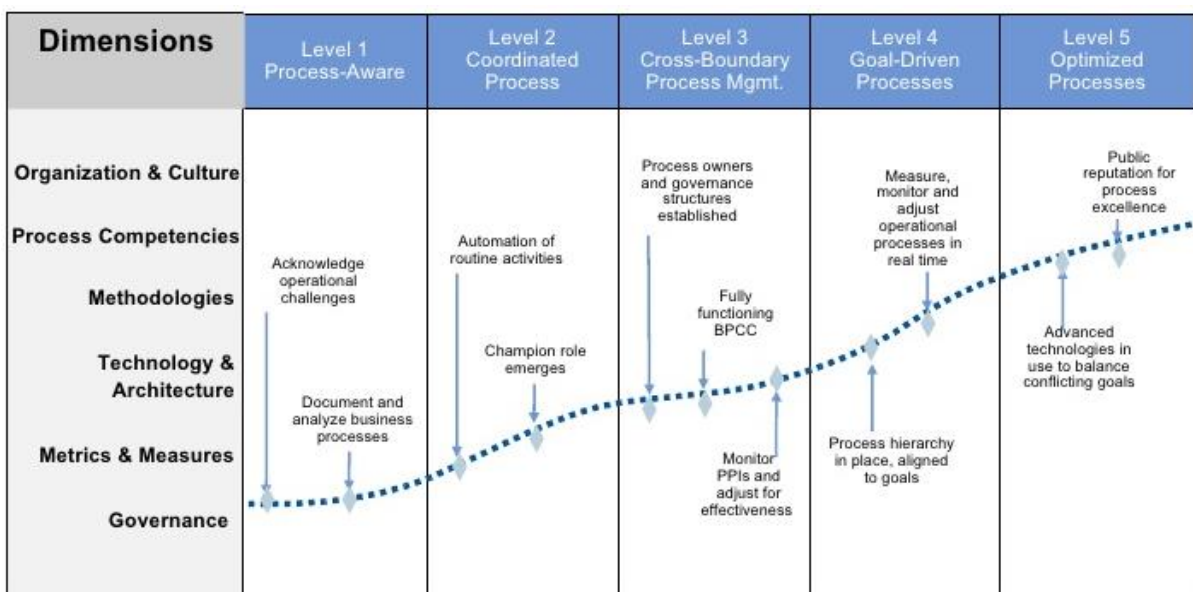


Fig. 1: Gartner's IT Score for BPM

Gartner explains the various dimensions for Business Process Management as shown in Figure 1 (source- <https://www.slideshare.net/Gartner/gartners-itscore-for-bpm-maturity>.)

Gartner's IT Score for BPM Maturity explains various levels for effective processing of data:

- **Level 1:** Process-Aware
- **Level 2:** Coordinated Process
- **Level 3:** Cross-Boundary Process Mgmt.
- **Level 4:** Goal-Driven Processes
- **Level 5:** Optimized Processes

RESEARCH METHODOLOGY

The research carried out was Descriptive Research Type where quantitative data was used. Based on the purpose and objectives of the research the questionnaire was designed to provide answer to following aspects which emphasize the role and importance of BI in ITES sector industries

The questions were divided into various parts as below –

- ✓ Awareness / Knowledge of BI
- ✓ Implementation Strategy for BI
- ✓ Resources and their utilization / availability
- ✓ BI performance, outcomes, satisfaction and achievements / results.
- ✓ Overall impact on organization.

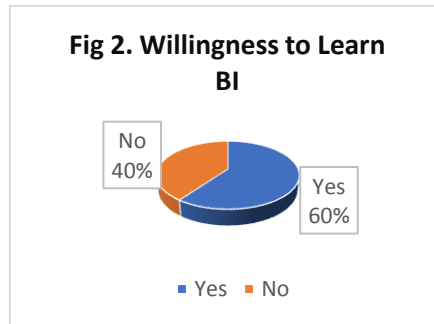
Questions were formulated as to find out the impact of efficient and effective implementation of BI on the said Industries as below -

- Q – Finding out awareness about BI and its Need felt by the Users / Organization
- Q – Finding out Impact of BI on functional efficiency of individual as well as Organization
- Q – Finding out Impact of BI on resource utilization
- Q – Finding out Impact of BI on functional efficiency of individual as well as Organization
- Q – Finding out Impact of BI on Decision Making process.
- Q – Finding out Top managements responsibility, commitment and behaviour about BI
- Q – Finding out Impact of BI on Process optimization
- Q – Finding out Impact of BI on Revenues and Profits
- Q – Finding out impact of BI on Business Conduct model
- Q – Finding out Impact of BI on Paradigm Shift experienced by individual as well as Organization
- Q – Finding out Impact of BI on time factor pertaining to individual as well as Organization as a whole
- Q – Finding out issues with BI systems currently in place
- Q – Finding out how current BI systems in place were implemented, their performance and their user friendliness

A total response of 1000 respondents was taken. The data analysis performed using statistical tools like SPSS revealed the following facts which have a direct impact on the Organization -

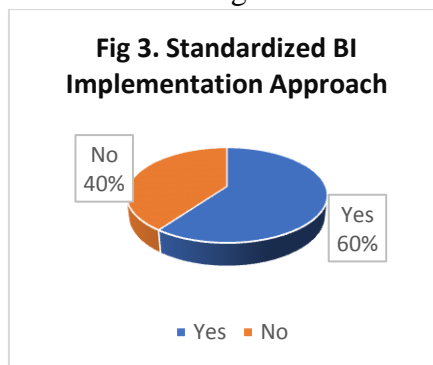
Willingness to Learn BI and its Need:

Out of total respondents a majority of 84% respondents expressed the need of BI and their willingness to learn the same. Further it was found that 66% person people had no or limited awareness of BI.



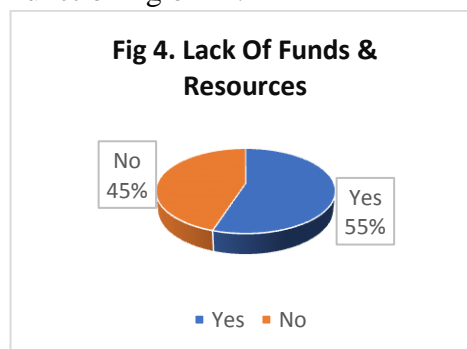
Lack of Standardized Implementation Approach:

Out of total respondents a majority of 90% respondents said that a standard BI implementation strategy was not followed. None of the standard practises like Induction Training, Performance Monitoring and Benchmarking were followed.



Lack of Sufficient Funds and Resources:

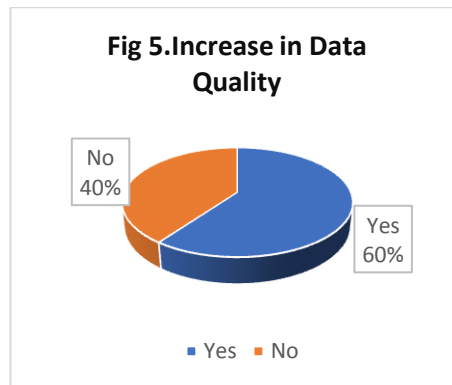
Out of total respondents a majority of 92% respondents said that the required funds and resources were not provided by the management. Management stressed more on adjusting within existing resources. Full-fledged support for necessary IT resources(Hardware, Software and Training) was not supported by Management which is a crucial factor for smooth functioning of BI.



Increase in Data Quality and Functional Efficiency:

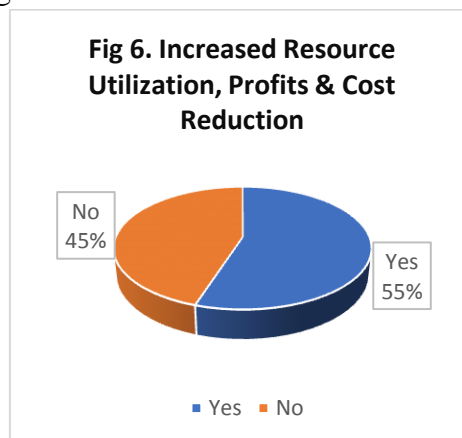
Out of total respondents a majority of 65% respondents claimed that BI has brought about a major increase in data quality. This further added to satisfactory BI performance expressed by the respondents. Respondents expressed the ease in use of

BI which further had exponential impact on the role support thereby leading to a major increase in Functional Efficiency.



Enhanced Resource Utilization, Profits and Cost Reduction:

Out of total respondents a majority of 55% respondents claimed that BI has brought about a major increase in Resource Utilization. This further added to increase in the Profit Levels and thereby helping in Cost Reduction.



ANALYSIS AND FINDINGS OF THE RESEARCH

As per the rigorous experimentation performed with effective techniques the above data analysis can be structured as follows:

- A. For efficient implementation of BI following factors play a very important role :
 - a. Awareness about BI amongst the users.
 - b. Need to gain competitive advantage.
 - c. Development of BI systems as per need of the Organization.
 - d. Following a implementation Strategy for BI implementation.
 - e. Induction training to users of BI.
 - f. Performance Monitoring and evaluation of BI with Benchmarking.
 - g. Sufficient provision of Funds and Resources.

- B. Effective and Efficient Implementation of BI leads to :
- a. Increased functional efficiency
 - b. Increased Resource Utilization
 - c. Increase in Revenues and profits
 - d. Increase in Customer Base
 - e. Operations and Process Optimization
 - f. More emphasis and focus on Organizational Data
 - g. A more committed Top Management
 - h. Improved Business Conduct Model
 - i. Adaptation to Market Dynamics

SUGGESTIONS AND RECOMMENDATIONS

The researcher on the basis of the study is suggesting the *BISG (BI Implementation for Sustainability and Growth) model* for efficient and effective implementation of BI for harnessing its capabilities.

This model suggests that minimal following steps be taken by any Organization willing to harness the BI capabilities and ensure success of BI strategy -

1. Find out the need for BI
2. Take in to Confidence all Stakeholders
3. Educate one and all (from Users to Top Management)about BI capabilities
4. Create a business case and outline the expected benefits
5. Obtain buy in from stakeholders, especially the senior executives
6. Have an enterprise-wide perspective
7. Establish criteria for success
8. Treat information as an asset
9. Adopt best practices and standards
10. Set up change management procedures
11. BI strategy should align with the overall IT strategy and enterprise goals
12. Do a current state, future state, and gap analysis
13. Think actionable and baby steps
14. Establish governance body
15. Use iterative implementation approach with parallel tracks
16. Work with frameworks and adopt proven methodologies
17. Assess BI readiness of the organization and identify related gaps and issues
18. Document and analyse the constraints and assumptions
19. Consider all BI components
20. Have a iterative performance monitoring and evaluation process

Potential pitfalls to avoid when designing the BI strategy:

1. Don't fall into the trap of starting with a narrow vision. BI strategy needs to be holistic and prepared in the context of the wider BI definition.

2. Don't plan to use big-bang implementation approach. It has been proven that iterative implementation works better for BI initiatives.
3. Always remember that scope of BI is not limited to just selection and implementation of technology..
4. BI iterations should not be done in the haphazard manner. BI strategy document is the necessary roadmap that you should follow as you begin designing BI environment.
5. Don't just focus on data integration and state-of-the-art BI tools. BI strategy should be comprehensive and it should incorporate much more than a data warehouse or BI tools.
6. During warehouse-centric planning, don't lose sight of the broad vision to ensure the design of a successful enterprise-wide informational asset.
7. Don't adopt inflexible approach. BI strategy should be treated as a living artifact.
8. It should be constantly tuned and adjusted to reflect the needs of your business.

The BISG model is shown below in Figure.

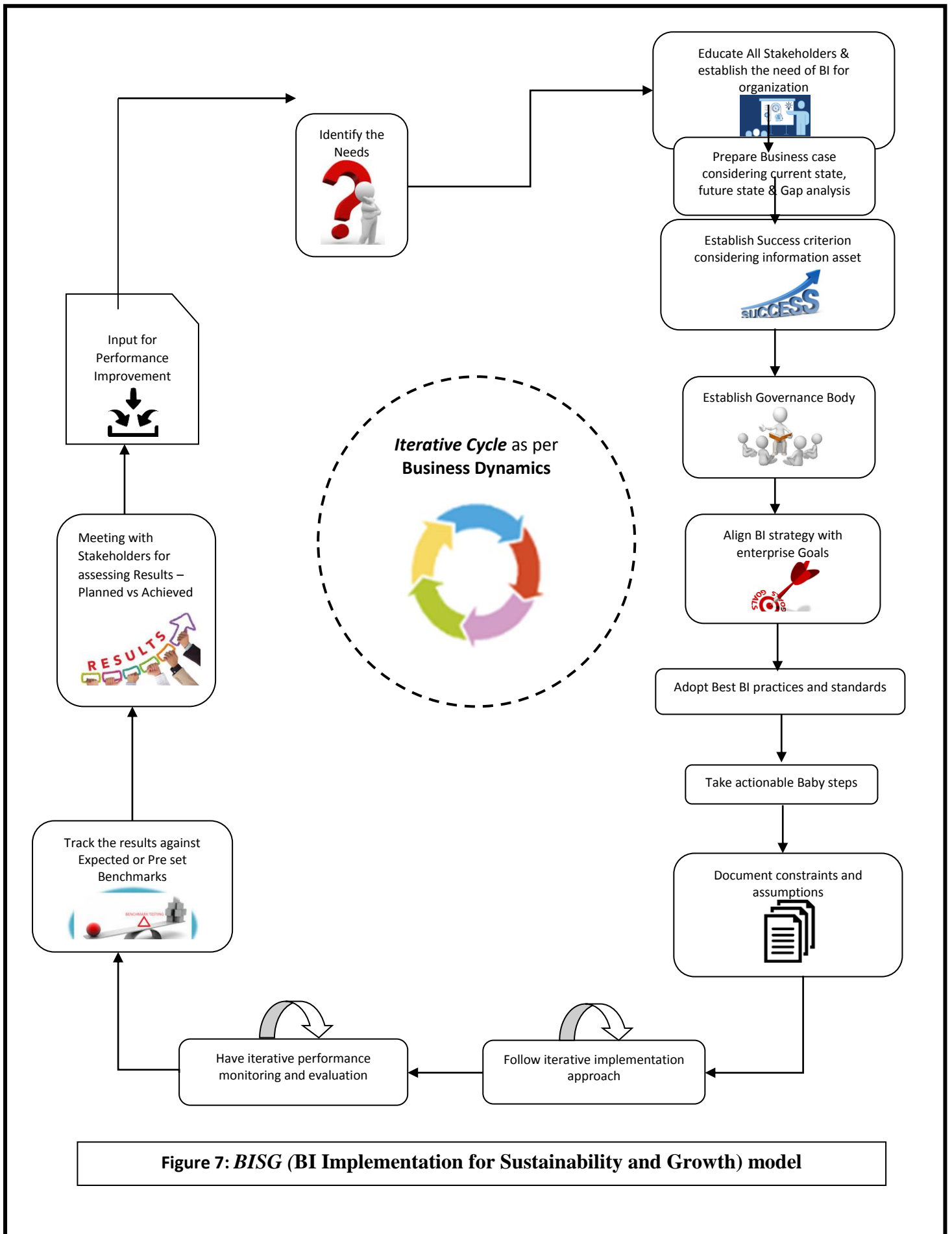


Figure 7: BISG (BI Implementation for Sustainability and Growth) model

CONCLUSION

The current trends in the development of Business Intelligence (BI) help to include innovative practices in the organizations. This will result in effective data analysis and expected outcomes. The research concludes that an Effective and Efficient implementation of BI leads to Sustainability and Growth of Business in today's dynamic Business Environment. BI has a direct impact on the performance on growth parameters which are crucial for the Organizations very Existence and Future Growth.

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