
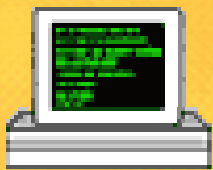


# Improve Efficiency Reduce Cost through **ICT & BI**



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## BI – An ICT Tool For Improving Efficiency & Reducing Cost

### Issues & Challenges

#### Year 2008

- Unprecedented year in business history
- Business Economics undergone severe pain
- Fertilizer industry had serious punch
- Global issues
- Retention of Knowledge worker a challenge

#### Year 2009

- Not different, more challenge
- Severe Fluctuation in pricing continues
- Pressure on investment etc.

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**Issues & Challenges**

- Optimize Cost Improve Efficiency Reduce Wastage
- Plenty of Data How to make use for intelligence
- Plant Health Management
- Project Monitoring
- Market Intelligence
- Timely Financial Analysis & Corrections
- Demand Forecasting
- Soil Productivity and Crop Advisory
- Knowledge Creation

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**Inventory Optimization**

- Consolidation for inventory sharing & Optimization
- Monitoring of obsolete, surplus & non moving items
- Consumption and procurement trends analysis
- Identification of person for new code generation and procurement
- Lead time analysis and adoption of tools like e-procurement
- Vendor – Item relation
- Vendor analysis for timely delivery, quality
- Past rate Analysis to be available simultaneously

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### RM Procurement

- Volatility in the market
- At what rate it is viable to procure – drive RM Cost from End Product
- Market Intelligence on availability, leading buyer, \$ fluctuation
- Market Demand both RM as well as End Product
- Analyse History data
- Short term / Long term agreements

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### Cost of Production

- Analytics for Cost of Production
- Identify Areas of Saving by matching Industry Data
- What if Analysis
- Identify Reasons of higher cost w.r. to previous cost data

### Plant Health Management

- Shutdown Planning & Optimization
- Creation of Plant specification with BOM, Aging and Maintenance / Replacement Schedule, Symptoms to be attended with action, Skill Requirement etc
- Mapping of test reports with Plants Original Specifications
- Creation of Plant Database with existing status
- Breakdown History with causes for knowledge creation
- Alerts for reminders

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**Human Resource**

- Applications of Analytics
  - to Optimize HR
  - Do Manpower, Succession and Manpower Planning
  - Impact Analysis for wage / pay revisions
  - Manage OT, Medical, Travel and other welfare expenses
  - Carry out Disease Analysis and arrange for alternate treatment
  - HR Skill Analysis and identify Development Needs

**Communications & Travelling**

- Conferencing Audio / Video
- IP Telephony
- Email and online chatting

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**Marketing & Distribution**

- Market Intelligence in terms of Potential Estimation, Demand and Sales Forecast

**Potential Estimation**

- Cultivated Area under various crops \* Fertilizer dosage under each crop as per soil requirement

**Short Term Demand** - to meet existing demand

**Long Term Demand**- for policy and investment decisions

Sales Forecast

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Potential & Demand Forecast and Sales / Distribution Planning

- available land, cultivated area & rain fed area
- area under irrigation for multiple cropping
- soil characteristics and nutrient content
- Rainfall analysis
- Cropping pattern
- Financial position of farmers
- Small & big farm holders
- Fertilizer Crop Price Ratio
- Crop Advisory Services & Profitability
- Rake Point, Storage Point & Delivery Point Mapping
- Competitors position

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ANALYTICS LEADS TO

Production / Import Plan & Distribution Plan

Cash inflow plan and outflow assessment

Wagons, Truck and Storage Planning

Optimize transport cost, minimize storage duration and avoid wasteful inter warehouse movement

Minimize funds tied up in inventories, save interest costs, conserve foreign exchange, avoid running out of stock and increase sales and improve profits

Nutrient Replenishment in Soil & Fertilizer Composition

Major  
Obstruction

Reliability of  
Monsoon

Re-planning, Diversion and

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### Solutions

- Innovation & transformation
- Look Business Differently
- Optimize profits by doing more with less
- Plenty of data with organizations
- To be leveraged and converted into BI
- Reactive and proactive decision making
- Analytics through drilldown
- Statistical Analysis
- Forecasting
- Predictive Modeling & Re-engineering.
- Optimization etc.

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Business Intelligence is a process for increasing the competitive advantage of a business by intelligent use of available data in decision making. The process involves:

- Data Sourcing
- Data Analysis
- Situation Awareness
- Risk Analysis
- Decision Support
  - Forecasting
  - Planning
  - Re-planning
  - Decision Making

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Contd...

What BI can do

- ICT Tools are capable for proactive intelligence, Alerts, Ad hoc queries, real time analysis, interactive dashboard etc
- Can provide textual and graphical presentation
- May set up KM Portal for inf. Sharing, discussions, analytics and intelligence
- Can create interface between Business needs and available information and thus result into actionable information
- Can create a single Database by Data Mining and Warehousing
- What if analysis for cost and process optimization
- Creates a learning culture by sharing & KM Portal Creation
- KM Portal help in Internal process improvement, operational efficiency, Fast & Innovative product development with customer centric approach

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What BI can do

- Data Extraction to Word, Excel Sheets for independent working, Analysis and Reporting and thus enhancing the timely decision making
- KPI s and KRAs mapping
- However Make Analytics – ongoing activity, not a mere project. Let it be a part of performance management framework
- Shared vision essential to leverage analytics fully

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**Tools**

- No of tools are available like Business Objects, SAS, Cognos, Hyperian, Ist key etc.
- The most popular tool is Excel for Analytics
- The limitation of Excel is Data Mining, Data Warehousing, Integration, Dash Board creation etc.

**Demonstration**

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The views presented are from ICT and BI technology point of view. However for improving efficiency and reducing cost in a particular area, the related experts have to sit to-gather with ICT & BI analyst and prepare a blue print of what is to be achieved and how to be achieved.

**Thank You for patient hearing and interaction**

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