HOW TO DESIGN AN EFFECTIVE BUSINESS INTELLIGENCE STRATEGY FOR YOUR ORGANISATION

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How to design an effective BI strategy for your organisation?

As businesses start understanding the real value of data, business intelligence solutions have gained huge popularity in recent times. Without proper data analytics solutions, all the data stored in large servers becomes useless. Proper BI tools can harness this data to translate it into actionable business insights. Riding on this popularity, BI solutions are innovating at a rapid pace. However, BI solutions are not one-size-fits-all solutions. Each organisation has different BI requirements. As such, it becomes important to design the right BI strategy for your organisation.

Here are **6 important** areas that you should consider when creating a new BI strategy for your organisation:

1) Define your VISION

Articulating a clear vision and goals is the first thing to do while designing a BI strategy. Firstly, you should clearly understand what business intelligence is and how it is going to benefit your organisation. In addition, you should be able to clearly identify BI needs of your organisation. The fact that BI offers amazing benefits to organisations doesn't mean that you should have it. The point is to understand what you are trying to accomplish through a BI solution.

At the outset, a BI strategy can be broader but at the same time, it should also be concise, allowing you to easily implement smaller incremental BI projects. Design a plan that clearly defines your business performance measurements and proactively monitors them. At the same time, your plan should be agile enough to enable you to quickly realign business strategies to meet changing technologies and customer requirements.

From a technical perspective, BI solutions deal with data and analytics. So, ponder on what analytics you would keep track of, what are the data sources (historic and current), primary reporting and data analytics needs etc. In addition, you should research industry key performance indicators such as sales, ROI, revenues, customer experience etc; company-specific metrics as well as industry-specific metrics. Last but not least, identify your BI solution audience and stakeholders' objectives and make sure that your BI solutions are effectively catering to their needs.

2) Define your BI Team

A business intelligence project can be successful only when you place the right people in the right positions/levels while providing them with the right tools.

"Whomever pulls the sword from the stone will lead this project."

Before creating a BI team, you should identify a BI sponsor who monitors BI teams and resolves issues identified by these teams while interacting with business managers of each BI group. Ideally, the sponsor would be someone associated with data and values data and finance. A CFO would be a good bet for this role. While the CFO or a similar position can directly interact with data, he/she can also provide the funds required for the project.

A dedicated BI team is recommended, though it is not always necessary. However, having a team to manage a BI strategy makes it efficient and complete. First you should define BI roles and fill them with appropriate people. While each organisation has different requirements, the most common BI roles are as follows:

➢ BI MANAGER: A BI manager also acts as a sponsor for the user group and interacts with the project manager to manage the BI project.
➢ BI PROJECT MANAGER: Leader of a BI team. He/she should understand business processes, analyse them, anticipate user requirements and manage expectations. In addition, the project manager interacts with leaders of other projects to eliminate silos and develop a collaborated environment.
➢ BI BUSINESS SPECIALIST: Leads data quality programs, identifies right data uses and data structures.
➢ BI DEVELOPER: Writes code for BI programs
➢ BI DATA ANALYST: Analyses data and translate it into actionable insights
➢ BI DECISION SUPPORT ANALYST: Understands issues and provides required data to resolves issues.
➢ BI ETL SPECIALIST: Has the expertise to extract data from sources in the best way.

➢ BI DESIGNER: Designs data structures and optimises them for optimal access and better performance of applications.
➢ DATABASE ADMINISTRATOR: Manages physical databases
➢ BI MISCELLANEOUS EXECUTIVES: Support staff to perform various BI tasks

Most successful BI projects are run by dedicated BI teams. Without a dedicated BI team, the project becomes incomplete and inefficient. It is because employees must split their working hours between BI tasks and their core business tasks. Obviously, BI tasks will become secondary for them as they would be more accountable for their primary roles. With a dedicated BI team, you can bring accountability to the project. When roles and responsibilities are clearly defined, you can successfully run multiple BI projects.

3) Define your Data Sources
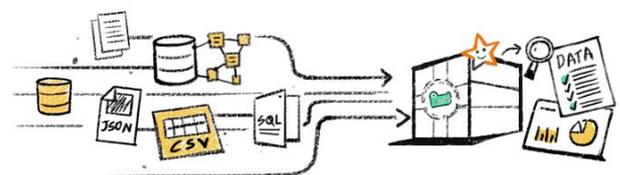
With cloud, IoT and mobility solutions dominating IT, data is coming from everywhere. As such, your databases get flooded with raw data in quick time. Responsibility in a BI project is to extract this data, clean it and translate it into business value. So, identifying your data sources is vital.

The first source is the central data or the core data of the company. This is the data gathered by your company website, mobile app and other products and services of your company. The second source is the peripheral data that is collected via your secondary apps such as ERP, CRM etc. The third source is the external data that is collected when you integrate your network with 3rd party solutions.

The next step is to identify the data warehouse for your BI project. You'll have to decide whether to use an existing one, realign it or create a new one. This is where you will be storing the historic and current data in a central repository so that you can have a comprehensive view of what's happening within the organisation. Using this data, you can create analytics reports, market research, etc. Unlike traditional databases, data warehouses are not updated in real-time as you will be looking at historic views and analytics.

"Here's a list of 100,000 warehouses full of data. I'd like you to condense them down to one meaningful warehouse."

There are different types of data warehousing models

➢ TRADITIONAL DBMS: Regular row-based databases such as Oracle, SAP, SQL Server etc.

➢ ANALYTICS-READY DBMS: Column-oriented DBMS that are analytics-ready such as Teradata, Greenplum etc.

➢ PLUG-N-PLAY DBMS: Plug-n-play databases that come with software and hardware preinstalled. E.g.: SAP HANA, IBM Netezza, Oracle Exadata

➢ CLOUD DATA WAREHOUSING: Data warehousing is offered as a service over the internet. Amazon Redshift, Azure SQL Datawarehouse are some examples.

While creating a data warehouse, consider key aspects such as the schema design, scalability, DB size, concurrency and cloud offering.

4) Define your Toolset

For any successful project, the key lies in choosing the right tools for the right processes. BI projects are not different. So, spending time on tool selection is non-negotiable. Assess the availability of the toolset and check if the current toolset can serve the purpose for the current period and will it be able to cater to future technology needs of the company. If not, it is a good move to upgrade. As a good practice, assess the capability of the available software first. Is the software capable of managing data quality programs or do you need to upgrade it? In addition, does the software support your operations for the coming years? After you finalise the software, you can think about the required hardware and realign your hardware infrastructure around it.

Each business has specific BI requirements. For instance, if you just want to analyse the performance of your company, any out-of-box BI tool that can analyse the historic data can serve the purpose. When customer and vendor interaction is involved, a robust and scalable tool is needed. If you want to proactively analyse data and provide real-time solutions, you need advanced data analytics tools that can use the power of AI and ML to serve native as well as cloud audience.

Any BI tool is only as good as the data that it pulls out. So, make sure that the tool you select should pull out data quickly and accurately.

The entire BI process can be classified into 3 categories namely Extract Transform Load (ETL), data warehouse and data visualisation.

> **ETL/Data Integration:** Data extraction is the first step in a BI process. The BI tool you choose should be able to dig out raw databases and quickly pull out accurate data. It should also be able to extract data from disparate sources and integrate it into a central repository.

ETL/Data Integration Tools
AWS Glue, Hevo, Skyvia, Microsoft SQL Server Integrated Services (SSIS), Oracle Data Integrator, IBM Infosphere Information Service, Jasper etc.

> **Data Warehousing:** Check if your organisation has the right data warehouse to centrally manage the extracted data? How are you going to integrate this data? What are the tools required to clean this data and translate it into business actionable insights? In addition, check if you would want manage data warehousing in-house or in the cloud.

Data Warehousing Tools
Amazon Redshift, Google BigQuery, Snowflake, Microsoft Azure etc.

> **Reporting tools:** After processing the data, it should be presented to users in customised formats. As such, you need reporting tools that can give clear insights into business performance. What are the tools available at your disposal? Do they offer visually appealing reports? Do these tools offer mobile-based reports? What are the available output formats; excel, PDF, CSV etc.

Reporting Tools
Microsoft PowerBI, JasperReport (Open-source), BIRT, ReportServer (Open-source), Pentaho etc.

Some of the key features required for a BI tool are mobile support, zero footprint, usability, portal integration, reusable insights across BI apps, advanced and predictive analytics, communication facilities etc.

Choosing proven BI tools has advantages as well as disadvantages. For instance, Tableau has been around from many years. So, you get a stable product with large community and support forums. However, it might lack some new UI features offered by new entrants, e.g. Power BI. So, choosing the right tool for your company is very important.

5) Define Metrics and Key Performance Indicators

Before implementing a BI project, you should know what you are trying to achieve. As BI solutions try to monitor the performance of an organisation using key performance indicators and provide solutions, you should first define your KPIs. These KPIs vary from organisation to organisation.

To derive the right KPIs, you should define your reports. Check out which reports generate the data that you need, and which reports are effective and eliminate redundant data. It is important to choose KPIs that are auditable and customisable. Once you define your KPIs using a

set of measures, you will be able to quickly create and customise smaller BI projects within the organisation. Ideally, the KPIs should be around 20.

6) Define Feedback programs

As with any other project, BI projects require constant monitoring and feedback loops. It is important to plan regular meetings with stakeholders and corresponding teams to assess the progress of the project.

- ✓ What is the progress of the project?
- ✓ Are you able to pull out right data?
- ✓ How quickly are you able to clean the data?
- ✓ Are you able to translate data into actionable insights?
- ✓ How much value is the BI project offering to the organisation?
- ✓ What are the overall costs?
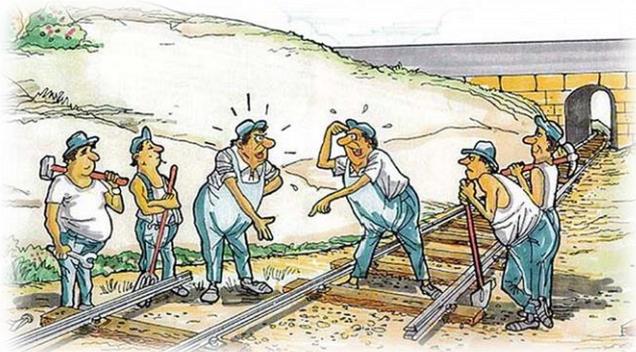
Conduct review meetings from the beginning to ensure that your project is on the right track.

While implementing business intelligence into your processes can be tempting, it is important to create a good BI strategy first. Equally important is dedicating a team for the BI project. However, many organisations face the tough challenge of hiring employees who have expertise in BI technologies. Either they must train people which costs them time and money, or they must compromise with low-quality staff. On the other hand, BI processes and roles are still emerging. As such, many people lack the right approach to get into the right BI roles.

Whether you are an enterprise looking to implement a BI strategy or an aspiring BI professional, Brightred is here to help. We have a talented pool that are extensively trained on effectively handling every type of BI project.

Contact Brightred right now to get your BI project on the right track!

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