

Case Studies

For

Power BI

1. Operational Process Improvement for a group of dental hospitals

The Problem

The client wanted to improve their operational processes to make use of Power BI reports to identify the pitfalls of the processes, take steps to overcome the pitfalls identified in order to maximize their revenue. They also wanted to capture certain traits related to patients, such as which topographical region showed most patients.

The Solution

We developed a bunch of reports related to their assessment process. Questions like, Who did the initial assessment, intern, doctor or specialist? Was there a necessity to refer patient to a specialist? How many more assessments were required for a patient? We helped them infer an assessment index based on the above information. This traits of this index helped them identify where they were lacking in their assessment process and they improved it to a considerable level. Also, they could now predict when and how many interns to hire.

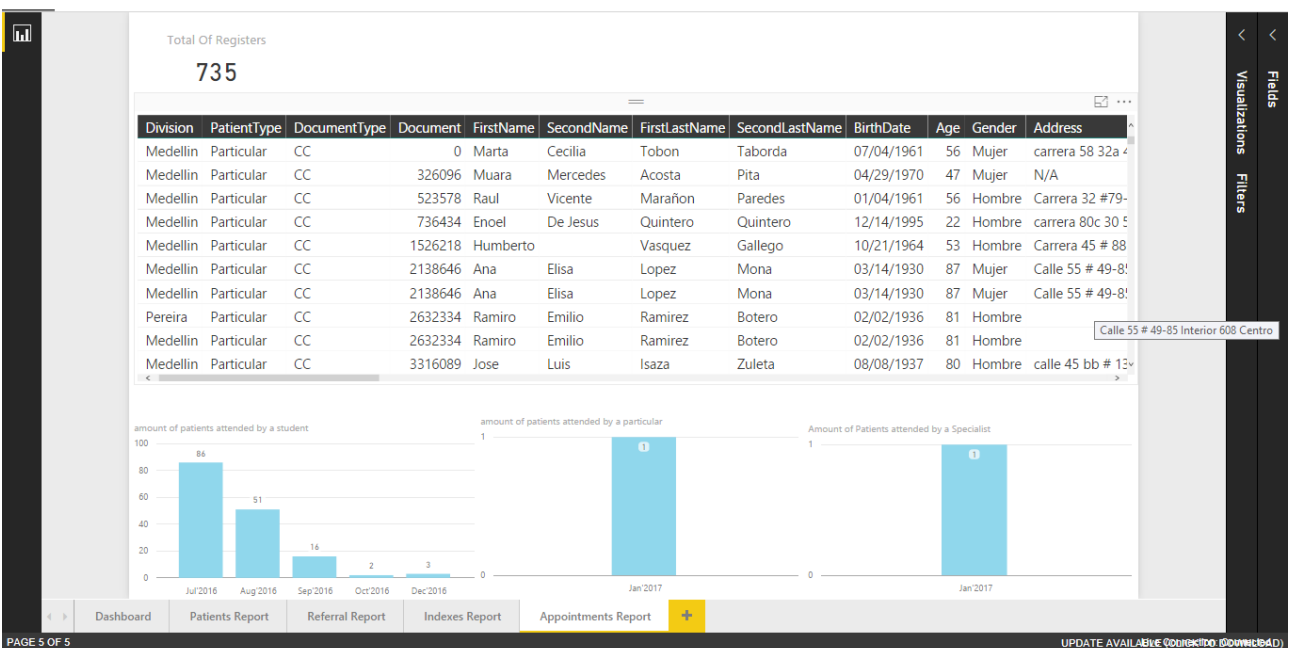
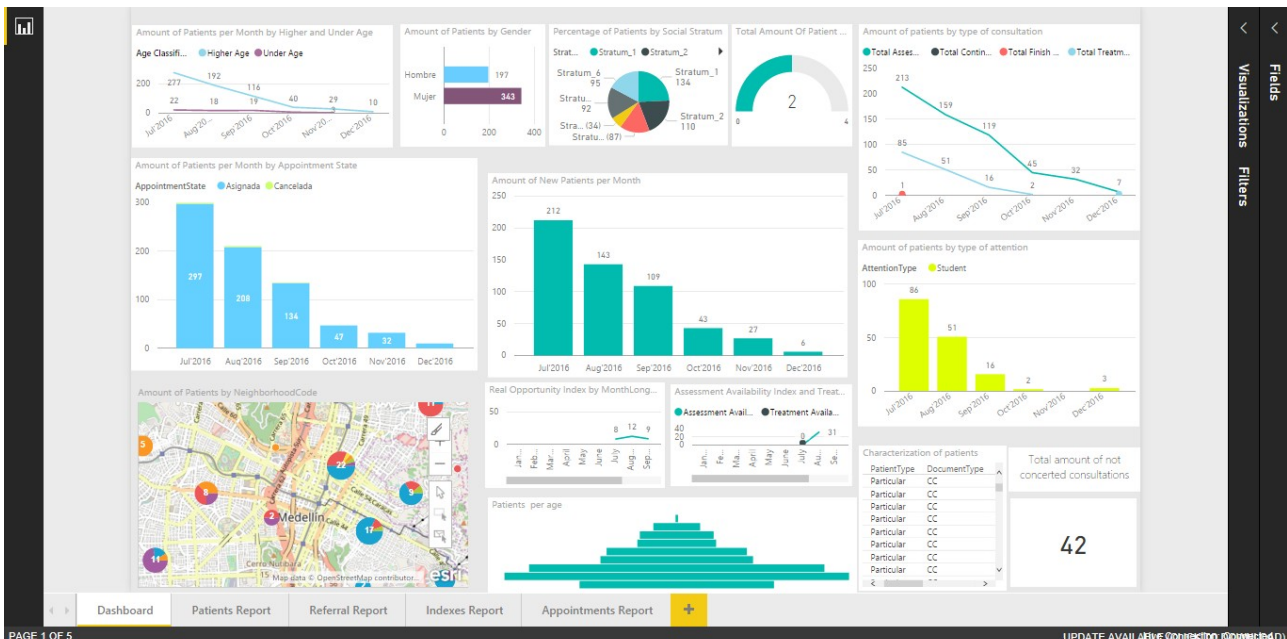
Other most import factor was treatment. We developed the reports that helped them study the treatment process. This included analysing the following parameters,

- What was the diagnosis made?
- What treatments were incorporated?
- What medications were involved?
- What were the instruments required for the treatment?
- How many patients were allergic to the treatments?
- What number of patients were in what stage of medical condition?

We helped them infer several treatment indexes by converting the information we captured into various quick-to-infer charts and graphs. These indexes led them to improve their diagnosis capabilities, identify what training to provide to interns and doctors, what medicines to use and keep an appropriate number of instruments in the hospital.

Several other reports, such as a map showing topography of the patients, regularity of employees, year-year and quarter-quarter revenue, branch wise revenue etc. were also developed.

A glimpse of reports



2. Power BI for a City Council

The problem

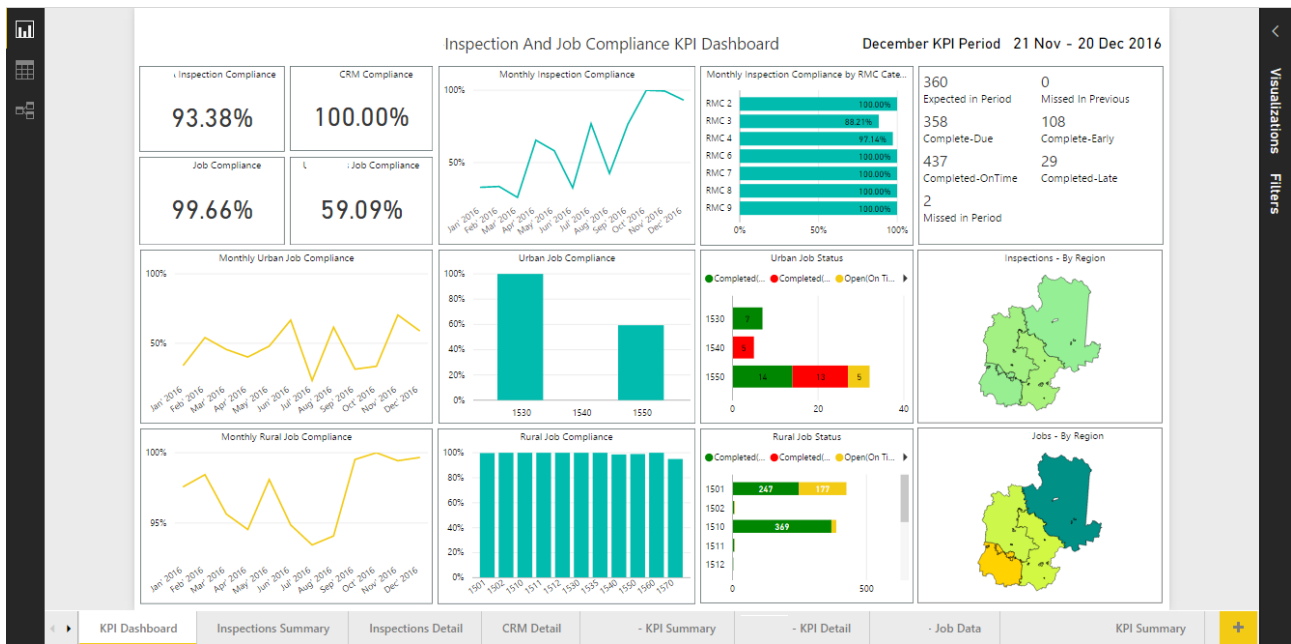
Our client contracted the task of road inspections. They wanted us to develop Power BI reports that would help them monitor the road inspection compliance by the contractors so as to stay rest assured that the road inspection process is going on track at any point of time.

The solution

The client categorized road on more than one basis. One of the category being urban roads and rural roads, another category being based on material used in the road and so on. We developed reports that would provide **inspection compliance** indicator to the client. These client could generate the *inspection compliance indicator based on categories of roads, contractors, frequency of inspections and the like*. Hence, client would get to know what is the compliance level of each contractor and identify how well each contractor is performing.

One separate report was developed for job compliance, or compliance of emergency / forceful inspections. These were the inspections that needed to be done urgently on demand basis such as removing fallen trees from the road and repair the road after floods. The report showed how well the contractor performed in relation to job compliance. Thus client could keep an eye on the entire road inspection process on the go by simply viewing the reports we developed.

A glimpse of reports



360
Expected in Period

358
Complete-Due

437
Completed-OnTime

0
Missed In Previous

108
Complete-Early

29
Completed-Late

360
Total Expected

466
Complete(Total)

2
Missed in Period

Month
Dec' 2016

Inspection
93.38 %

Period Start: 11/21/2016 | Period End: 12/20/2016

Road Code	Road Name	Expected Date	Due In Month	Insp Date	Status
R0046	N cad	12/01/2016	YES	12/01/2016	PASS
R0050	A iurt	12/09/2016	YES	12/01/2016	PASS
R0052	A i St	11/26/2016	YES	11/21/2016	PASS
R0058	Li Co	12/09/2016	YES	12/02/2016	PASS
R0059	W e D	12/09/2016	YES	12/02/2016	PASS
R0060	W dge	12/09/2016	YES	12/02/2016	PASS
R0061	W ess	12/09/2016	YES	12/02/2016	PASS
R0062	Li Co	12/09/2016	YES	12/02/2016	PASS
R0063	Sj ace	12/09/2016	YES	12/02/2016	PASS
R0064	C our	12/09/2016	YES	12/02/2016	PASS
R0065	V in C	12/09/2016	YES	12/02/2016	PASS
R0066	M ou	12/09/2016	YES	12/02/2016	PASS
R0067	W d C	12/09/2016	YES	12/02/2016	PASS
R0068	B rk C	12/09/2016	YES	12/02/2016	PASS
R0069	C tree	12/09/2016	YES	12/01/2016	PASS
R0071	Jz iurt (in)	12/09/2016	YES	12/01/2016	PASS
R0072	M Co	12/09/2016	YES	12/01/2016	PASS
R0073	A ou	12/09/2016	YES	12/01/2016	PASS

KPI Dashboard | Inspections Summary | Inspections Detail | CRM Detail | KPI Summary | KPI Detail | Job Data | KPI Summary

3. Helping HR in recruitment process

The challenge

Our client used to follow a manual paper-work based recruitment process. He had to manage a lot of data in excel sheets. The process was tedious and error prone. On the top of that, they could not afford to spend time in manually analysing the valuable information they captured. As they assigned us the task move towards shifting to new technologies and automating the data capturing and analysing process, they also wanted us to develop useful reports which would help them predict future trends.

The Solution

To keep the automation process in line with other tools used by the client, we suggested them to go with Power BI for reporting purpose.

We developed a number of reports for them. The visuals used were eye catching. The reports were easy enough to understand and even a lay man could grasp useful information by just a glance at a report. The reports contained useful indicators like total recruitment over time and average CTC offered to & is expected by the candidates. All the reports contained default filters like period (Apr 2016 - Mar 2017). We also provided a separate report that allowed to compare candidates based on the aspects like salary, qualification and experience. Drill down reports were included whenever required.

The client could now easily get to know top 10 sources of recruitment and top 10 reasons that made the candidates leave their previous company. The same data helped them to modify their existing policies and reduce employee attrition rate. They could now forecast a lower limit of written test score for selecting candidates. Number of reports included trends built up from the information. Trends like the salary expectations @ a certain experience level with a specific technical expertise helped them a lot in deciding the annual salary hike of their existing employees. Now they also have numbers of candidates who were expert in a specific technology. And the list of benefits goes on.

The client is more than satisfied with the ease of use and value of information they can capture using Power BI.

4. Power BI in Healthcare

The challenge

A hospital wanted us to help them with predictive analytics and forecasts for various aspects of the healthcare sector. Power BI was their first choice because of versatility of reports offered.

The solution

The vastness of health care sector demanded lot of reports to be developed. We did this task for them.

The first few questions that come to mind regarding health care sector revolve around patients: How many patients come for OPD? How many get admitted? In which age group they fall? To which race do they belong? What is the average time of their stay at hospitals? What is the mortality rate? What is the rate of cure? And so on. We developed reports that contained indicators that helped hospital management find answers of these questions using the reports and forecast important things like number of doctors and other staff required in a particular period of a year, predict expected medicine stock in a particular period, and requirement if any, to call specialist doctors from outside.

Various reports regarding cost of resources and profit earned were developed. A couple of reports were dedicated to payers and blood donors. An area ignored most of the times is epidemics. We also developed a report for trend analysis of epidemics and forecast demand of resources/employees.

A mix of visuals were used to make the reports that were easy to understand. An eye soothing colour scheme was used. Particular care was taken to refresh reports so that hospital management were presented the latest information all the time.

5. Power BI in diamond industry

The challenge

One of our clients who happens to be from the diamond industry wanted us to leverage the power of Power BI for trends and forecasting in their business. We were required to develop reports to give them insights of their business including but not limited to investment and resultant profit.

The solution

We developed an overall sales report that showed them the profit per Lot/Package based on cost of manufacturing/cost price and sales price. The report included filters like time period, the Shape/Size/Colour/Clarity and Cut of diamond. The report allowed drill down to explore the details. Various useful indicators that answered various questions were included e.g. is the pricing done is in-line with the market price, which customer was good enough to be retained/rejected and what shape was the most sought after. Another report focused on who is the best assorter based on analysis of who gave the closest opinion to the actual sales price of a diamond.

The client found the reports very useful and could take valuable decisions that boosted the profit by 37% to 45%.

6. Resolve the existing CRM report problems

The Challenge

One of our client was facing couple of issues in their existing CRM reports. The first problem was to the analyse the time spent in the process by their users. Their existing report doesn't show it accurately and in expected format. Another point was each time when higher authorities arrived at the site and asked for the reports, they need to do the complete report execution process again to show them the expected output as the report cannot be accessed for a particular set of records outside CRM, which is very time consuming.

The Solution

Keeping in mind the issues faced by the client, we suggested them to have reports developed in Microsoft Power BI, which gets connected to their CRM Online instance and fetch data according to the requirement and then publish those reports to the web. After the reports are published a link is provided which can further be used by the end users to view the reports online from outside the CRM and the same link is used to attach the Power BI report to CRM Dashboard which can be used by CRM users.

The suggestion provided by us was very helpful to them and both the issues, which were being faced by the client were resolved. Our suggestion and work both were highly appreciated by the client.

Words of appreciation from the client

“Your cooperation has helped to keep our operation run smoothly and has led to a profitable relationship between us”

“We look forward to many more years of working with you, and wish your company the success that it deserves.”

7. Analyse the performance of insurance policies

The Challenge

One of our Insurance domain client wanted to keep track of his business being executed at different locations. They also demanded that the report should not be difficult at all to understand. They wanted a report that helps them to know that which regions, branches and policies are doing more business and which are doing less based on that they could take appropriate actions for increasing their business.

The Solution

Keeping in mind their first requirement, we suggested the client to go with Power BI report and use the map visualization which will display the income location wise.

For the second requirement, we suggested him to have one single drill down report that would in initial view display revenue region wise but then further on drilling in each region displays details of that particular region and again drilling in would display details of that branch.

The hierarchy for drill down report is Region => Branch => Policy.

We developed the drill down report using Pivot Table.