

# Enabling insights-led enterprise change

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*In today's economy, especially in the South African context, businesses are becoming increasingly cost-conscious. Cash-strapped consumers are more circumspect about how and where they spend their money. Each year, millions of Rands are wasted through operational inefficiencies, which also often result in poor customer experiences. A practical way to address this is to use the available data to extract insights and use these insights to improve business operations intelligently.*

## An industry-wide data problem

One particularly troubled industry is healthcare. With the 2019 National Health Insurance Bill (B11-2019) set to overhaul the industry and medical aid schemes seeking to better manage their own costs and margins, many healthcare providers are facing significant profitability challenges. As one of the JSE's poorest-performing sectors, the industry is in desperate need of insights-led change. A major healthcare provider turned to insight to unlock potential improvements in its core business operations.

In getting to the heart of their business operations, what they uncovered was astounding – in some cases the same data was being captured manually up to 32 times by nursing staff, and nurses were spending up to 55 minutes of every available hour of nursing time on administrative tasks, rather than on patient care.

Rejected or short-paid claims account for up to 30 percent of all billing, costing the provider hundreds of millions of Rands annually. Furthermore, problematic claims can take up to ten times as long to resolve and require manual rectification by an administrator.

When approached by the healthcare provider to address this challenge, BSG designed an insights-led solution to improve the claim rejection rate and enable better prioritisation of rejected claims.

**1,500,000 cases  
comprising roughly 80  
million line items**

Through machine learning, BSG built a predictive model to identify high-risk cases. One and a half million cases were fed into the model, comprising roughly 80 million line items. The aim was to understand which cases were likely to be rejected: if the reasons for rejection could be established and managed upfront, this could significantly improve outcomes throughout the process.

## The long-term advantage of the right short-term solution

In the short term, BSG's data model reduced effort and improved collections during a 6 month pilot. In taking a strategic and forward-looking approach to developing the model and base to solve the claims

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## Patient billing: more than a headache

A known area of inefficiency was in the claims' management process – a major pain-point for both provider and patient. For any patient, a hospital stay can range from being inconvenient to being traumatic. Upon discharge, patients are at their most vulnerable, and receiving a large unexpected bill for treatments not covered by their medical aid at this point is an extremely unpleasant experience.

collection issue, BSG had also built an asset which could be used in the longer term to address and resolve other related business problems. The team identified eight additional business problems that the model could be leveraged to solve. This triggered inspiration in other parts of the business, where business leaders began to recognise what could be achieved through data insights improving business operations.

## A solution for everyone

By consolidating individual data points into a more complete and trusted data asset, rich and powerful features can be developed on this dataset and modelled to generate insights to benchmark and baseline the business, allowing issues to be identified more quickly and even for potential risks to be flagged before they materialise.

To find out more about how BSG can put your organisation's data to work solving business problems, please contact us to discuss a bespoke solution.

## About BSG

As a homegrown South African Consulting and Technology company, BSG is uniquely positioned to deliver solutions tailored to the South African context.

We have more than 20 years' experience across the banking, specialised financial services, insurance, healthcare, telecommunications, and oil and gas sectors. By employing a multi-skilled approach, BSG effectively leverages our clients' data to create solutions that improve the experiences of their customers and solve enterprise-scale challenges.

We understand the dynamics of Business and Technology, which allows us to create flow between supply and demand, bridging the gap between business and IT. We work with our clients to drive out success, transforming their operational platforms and creating the customer experiences they need.

Visit us at [www.bsg.co.za](http://www.bsg.co.za)

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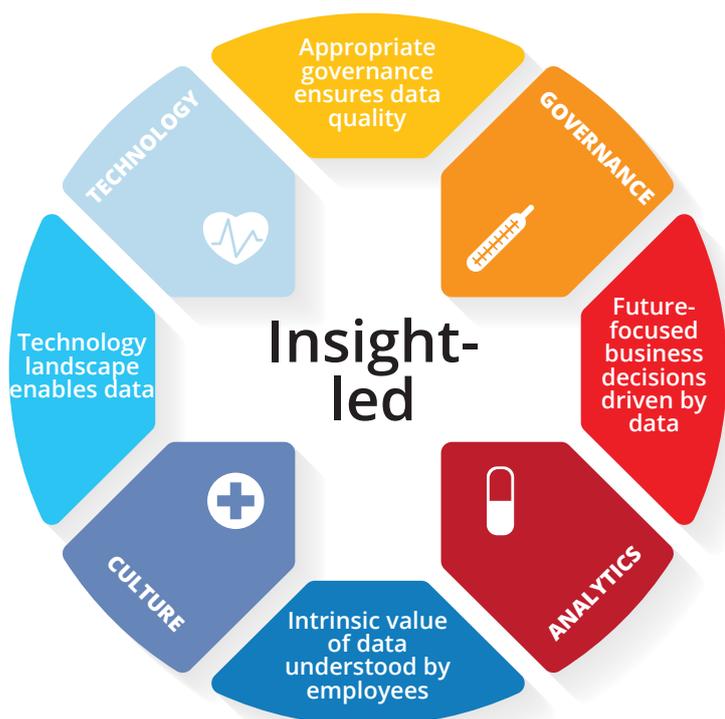
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## Eight additional business problems identified for solving through machine learning

Business data only creates value once it is analysed and insights are extracted and then implemented to solve business problems. These insights directly result in improved KPIs, such as cost-saving, increased profit, improved customer experience, increased efficiency and better risk management.



Unlocking potential ▶ Accelerating performance