THE FACTORS REQUIRED TO SUCCESSFULLY LEVERAGE DATA AND ANALYTICS

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This is the final article in a three-part series, covering the factors required to successfully leverage data and analytics.

Data can deliver significant benefits to organisations if managed properly and analysed effectively. Making decisions and acting based on data insights can help management and boards to set and execute proven strategies with strong conviction. That then allows companies to compete more effectively, reduce costs, improve margins and increase productivity. This does not have to come at a high cost and PFS Consulting often delivers valuable initial data insights at very reasonable cost.

Successfully turning data into insights is often not simple, and even getting it only partly right can mean your organisation follows a course of action that doesn't yield the results sought.

What can data analytics do for your organisation?

Data can help identify and understand operational inefficiencies in an organisation, understand and focus on drivers of key outcomes including profitability, reduce costs and cross subsidies.

It's important to remember that just looking at data won't help you become more successful. It will only help you achieve a strategy for success. The strategy is crucial because it helps direct your analytics efforts to where they'll yield the most value.

For example:

If your organisation is a health insurance firm and you want to increase customer loyalty and reduce churn, you may consider using data to implement a wellbeing model that differentiates your offer. Instead of simply paying out when customers need to use their insurance, you can help them reduce the risk that they'll need to claim on their health insurance. Using data and analytics can help you achieve this.

What organisational factors are required?

- Management support.
- Well designed data collection processes and governance.
- An understanding of data available and a cultural appreciation of the importance of accuracy at various levels from collection to reporting to decision making.
- Embedding the use of data in major decisions
- Understanding what data you have, where it came from and why it was collected is important as well as how the data will be used, and who will use it.

Then you can proactively use analytics to make decisions that drive action and inform future organisational decisions.

What individual factors are required?

You need to have someone in the business who is responsible for data and analytics. This person must have the technical skills to manage and interrogate the data, an understanding of the business context so they can ensure the insights they deliver are useful, and they must have an analytical mindset. In most organisations, this new professional hybrid doesn't yet exist.

There is a three-step journey for individuals to become analytically skilled:

1. Developing an initial understanding
2. Developing an analytical mindset
3. Acquiring specific data analytics skills

Organisations should support professionals in attaining and updating data analytics skills so that they can deliver maximum value to the business.

Techniques used by actuaries to understand data and provide insights and foresight, include:

- Supervised learning techniques, such as Linear regression and generalised linear modelling (GLM) Decision trees, Neural networks and Predictive modelling.

- Unsupervised techniques, such as Principal components analysis, Cluster analysis, Genetic algorithms and Neural networks.

- Other analytical techniques, including Simulation and applications of Markov chains, Bayesian analysis and Machine learning

Case Study:

Most organisations aren't yet equipped to maximise the value of data and become data-driven without expert advice. PFS Consulting helps organisations understand how best to leverage their data and to set a data-driven culture. We can train and transfer our knowledge.

We assisted a Jurisdictional Health system redesign its performance reporting framework, data management quality assurance, and system-wide business intelligence functions. This included providing expert advice and implementation of best practice data analysis and reporting, incorporating oversight of corporate compliance, data policies, practices and standards to assure data integrity. A comprehensive data management strategy was established that enabled data driven decision making in clinical operations, education and research, that optimised care outcomes and efficient resource allocation.

Link to the report:
https://health.act.gov.au/sites/default/files/2018-09/System-Wide%20Data%20Review%20Outcomes%20Report.pdf

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