



The Path to achieve Data Wisdom

White Paper by Carlos Alves

TABLE OF CONTENTS

<i>Introduction – The need for this White paper</i>	3
<i>Differentiating Data from Information</i>	4
CONCLUSION	8



INTRODUCTION – THE NEED FOR THIS WHITE PAPER

Customer data is a valuable business asset that have received less management attention, resources and business process than any other related to other value-driving parts of the organization.

Make the most of your data assets! Continually improving data quality and upping the intelligence of your business information will have a profoundly positive impact on the performance of your organization.

Data quality efforts are, by large, focused on ensuring data within systems meets the system specifications. If this is your only approach, your organization may be suffering from a lack of information, even though there is a lot of data in your databases and the majority of that data meets the requirements of the systems that were built to utilize it. Without taking a more intelligent approach to data quality and value, you will overlook the major component when making improvements — the business.

The data in those databases belongs to the business. It is created by them, acted upon by them and, ultimately, its quality value, or the lack of it, is determined by them. Trying to cleanse data using software alone, without consulting the business about what makes good quality information, could be a waste of time and money. To build a successful programme of continual

quality value improvement, you need to involve all three key elements of data governance — **people**, **process** and **technology**. Missing out on one of these could lead to failure.

The aim of this paper is therefore to help you understand the difference between data, information, knowledge and wisdom.

The impact of inadequate data in terms of direct costs, brand damage and missed opportunity, as well as why data quality is important to the organization.

The need to fully understand your organizations' current capability to deliver high data quality is inevitable imperative.

This paper details the data quality IQ maturity model, which enables you to plot your position and monitor your progress as you strive towards 'managed' and even 'optimal' quality.

Let's start by distinguishing between data, information, knowledge and wisdom.



DIFFERENTIATING DATA FROM INFORMATION

Wise UP — WHAT can be done with the right information?

The right information can enable your company to be truly wise.

A wise company is one that has clear understanding of the importance of their data. They will see that data forms the building blocks enabling them to meet their business goals and to make the right decisions, based on clear, reliable information and the knowledge gained through Experience and Investigations.

A wise organization acts with confidence and is rarely found lacking in credibility. Customers will learn to trust a company that prides itself on creating and maintaining high-quality knowledge about them. They will stick with that trusted brand, even when times get tough.

To become wise, an organization needs to understand the basics about data and how that data becomes information that then becomes knowledge and ultimately wisdom.

This is a natural progression that is described in the below illustration

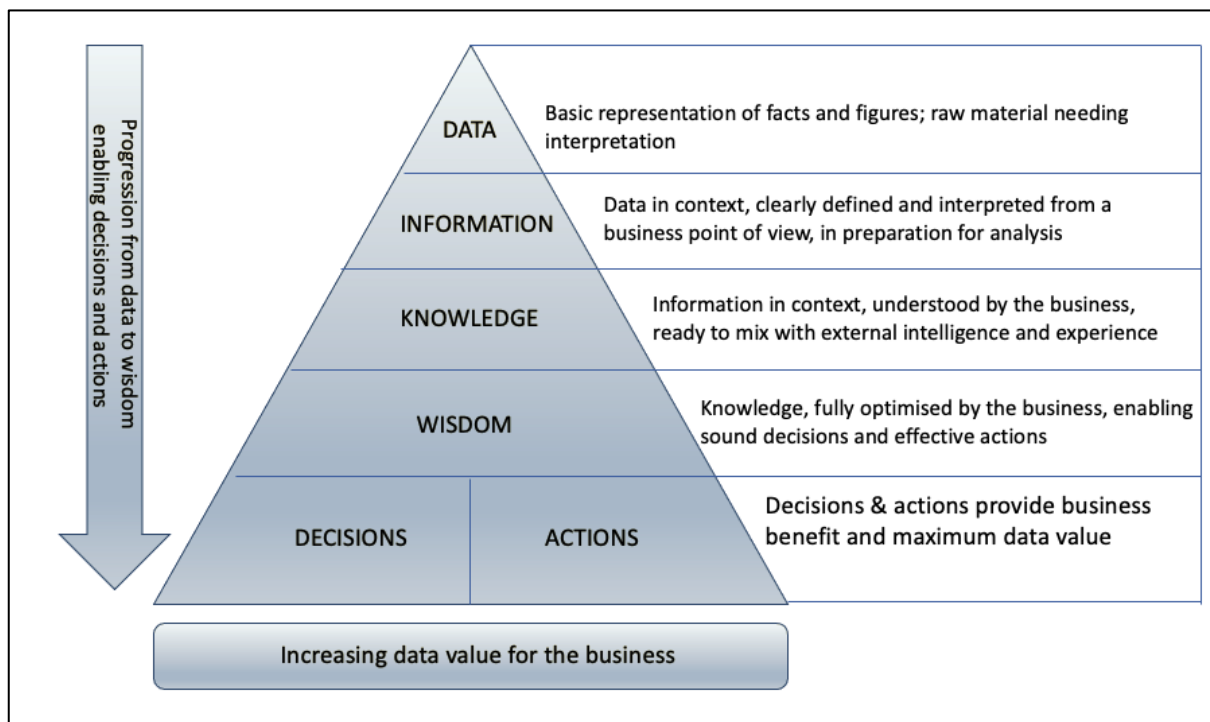


Illustration: The journey from Data to Wisdom

As you can see, as a company moves from data to wisdom, the data value increases greatly until the organization is able to maximize the value through intelligent decisions and actions.

Clarifying the steps along the way

Data

For the most part, data is simply the raw material that might become information once its definitions have been understood and once it has been interpreted according to those definitions.

Examples of data would be

- numbers in a spreadsheet;
- Number of words on a piece of paper;
- Number of documents in a SharePoint repository

The uses for raw data are quite limited without definitions and further contextual details. When it comes to customer data, its main purpose is as a starting point for learning more about your customers and your business.

Information

Information is data in context, defined and then interpreted according to the agreed definitions and business rules. When speaking about customer information, the definitions should be those that reflect the business needs of an organization and should be discussed and agreed by subject matter experts within the various business areas involved, and when progressed to form information and might become

- results in reports;
- paragraphs/sections in a articles and other papers;

The uses for information are vast and are critical to the success of any business endeavour. The main purpose of customer information is to represent reality in a reusable format, a digitized version of that customer, so to speak.

Knowledge

Knowledge is information that has been analysed and thoroughly understood by the business. To create good quality knowledge, you will want to combine and enrich the information you already have. You will make it readily accessible to those who need it, with the correct controls to ensure privacy. At every step between information and knowledge, the subject matter experts should be included in all key decisions and knowledge processes.

When our data examples become knowledge, they could now be in the form of;

- An analysis published within a journal/article/report
- Chapters in a book/Technical Article/Whitepaper;

The uses of knowledge are much deeper and far more valuable than those for information alone. The main purpose of knowledge is the expanded learning, understanding and interpretation of all available information.

Wisdom

Wisdom is knowledge that has been fully optimized, ready to enable the business to make crucial decisions and to take effective actions. Wisdom is the ability to execute marketing campaigns, determine policies concerning your customers, develop new products and services to take to market and, ultimately, to realize the true potential of an organization.

Wisdom is shared knowledge, mixed with external intelligence and business experience. It includes both qualitative and quantitative research and has the power to dramatically change a business.

When our data examples reach the deeper status of wisdom, their progression might include taking the knowledge gleaned from various channels to change the direction of your business.

The uses of wisdom are limited only by an organization's reach and underlying culture. Companies that become wise become highly successful. They are also the types of organizations that have devoted employees as they tend to be stimulating and enjoyable places to work.

Decisions and Actions

Actions and decisions are the end results of the journey from data to wisdom. They are the products of the efforts involved and are evidence that data value has been maximized.

Here are some practical examples of the actions and decisions that an organization can take when wisdom has been created.

- Ensure high levels of customer satisfaction by providing consistent messages to the right customers at the right time.
- Anticipate customer needs and offer proactive communications that are geared to meet those needs.
- Identify the warning signs of customer churn and develop policies to avoid customers leaving.



CONCLUSION

When embarking on the journey from data to wisdom, there is one essential element that must never be overlooked — **quality**. It is not possible to create information from your data if the data definitions are non-existent or do not reflect business rules. Without quality information, you cannot have knowledge or wisdom. Your decisions will be flawed and actions could be costly mistakes. Data and information quality are the keys to wisdom — something called intelligent quality.

Companies are grappling with how to capitalise on information and knowledge. They're striving, more often silently, to remedy business impacts rooted in poor quality of information and knowledge

According to *Kuan-Tsai Huang, Yang W. Lee and Richard Y. Wang* in their book "*Quality Information and Knowledge*", a firm's information represents the firm's collection and services to its clients. Quality information is increasingly recognised as the most valuable asset of any enterprise.