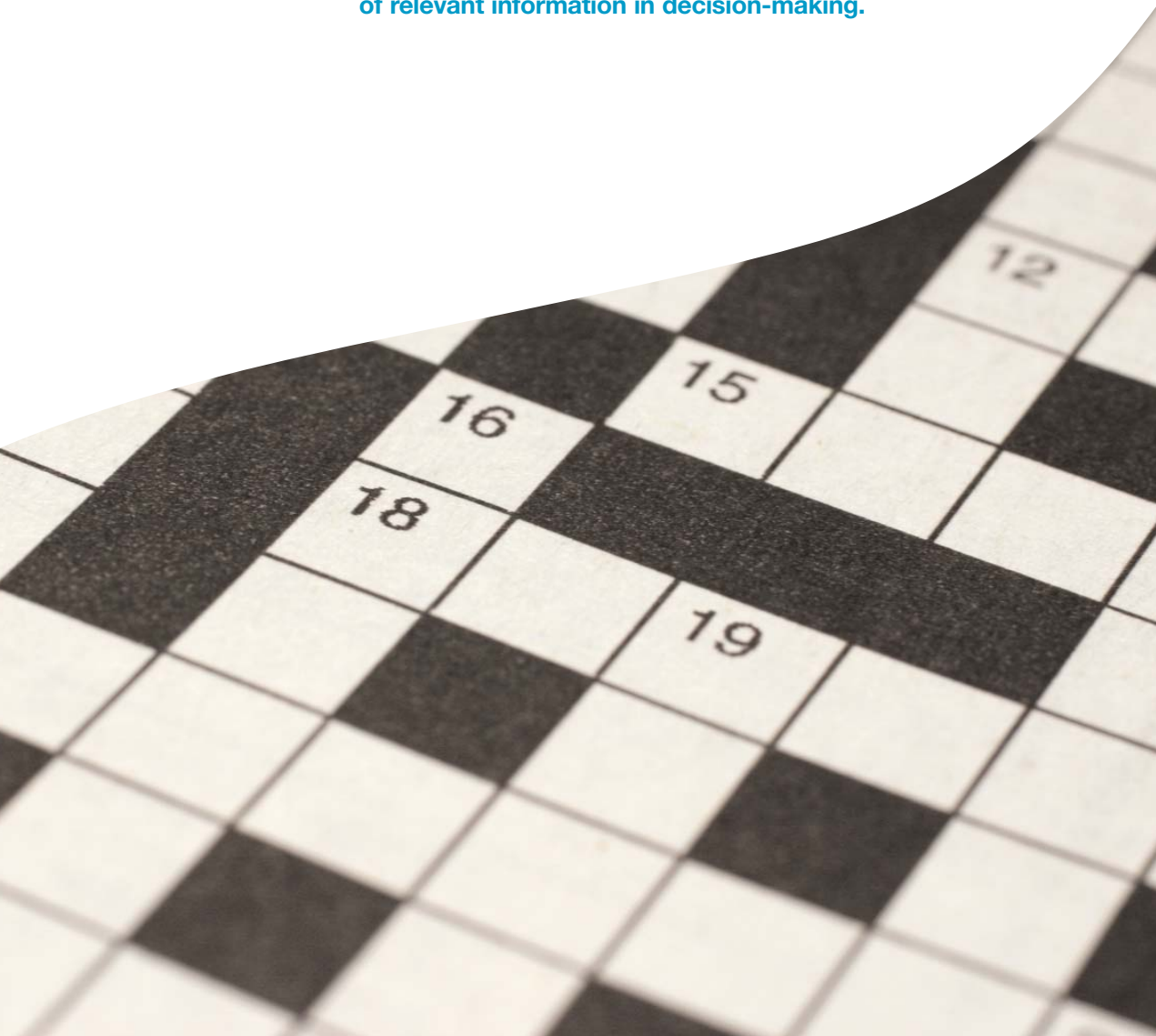


Harnessing the power of an Organisation's Information

How the Intelligent Enterprise develops a
leadership position through the effective use
of relevant information in decision-making.



The increase in corporate data is estimated at between 40% and 60% year-on-year, but 80% of all corporate data is stored in unstructured formats such as emails or spreadsheets.

Organisations continue to invest millions of pounds in technology and solutions to create, manage and store business data. The volume of data, in all of its forms, being generated is accelerating at an unprecedented level and consequently most organisations are finding it harder to harness this data so that people in their organisation can act on it to generate real business value.

Without successfully harnessing the information in their data, organisations fail to realise opportunities for generating competitive advantage and critical decisions are often made on the basis of historical and often inaccurate data stored in innumerable spreadsheets and documents. Consequently, organisations are failing to get a return from the investment that they have made in the generation of this data. Too many people in organisations are holding up their hands and saying, "We are getting it wrong. We've got too much data, but not enough information".

We refer to organisations who have successfully harnessed their data for comparative and/or competitive advantage as Intelligent Enterprises. These organisations, typically leaders in their market segments, are those that can beat their competitors through better insight about themselves, their customers, their market and their competition. Notable organisations that have achieved this status include Amazon, Dell, Tesco and Wal-mart.

To reach this pinnacle, they have completed a transformational journey through which they have made significant changes to their culture, processes, information landscape and technology platforms. The benefits for those who have successfully made the journey are substantial. Depending on the starting point, the journey can take some time, it is therefore critical that it is mapped out in a way that allows the organisation to move forward in a focused, incremental manner delivering business benefits at each step along the journey.

The challenge

We live and work in a data-rich world. The amount of data that people process on a daily basis is growing exponentially, and there is no sign of any let up. The increase in corporate data creation is estimated at between 40% and 60% year-on-year. What's more, analyst research shows that 80% of all corporate data is stored not in databases but in unstructured formats such as emails, spreadsheets or documents, leading to much data being duplicated, replicated or out of date.

Technology itself has simply added to the surge in data. How is it possible that after huge investments in Enterprise Resource Planning, Customer Management, Supply Chain and other systems initiatives today's managers and employees are not getting the data they need to confidently take key decisions or to drive operational effectiveness?

One of the key contributing factors to this situation is the way organisations have gone about implementing these initiatives, typically in a piecemeal fashion and without proper consideration of how the data could or should be used for the entire organisation's benefits. For example, how many organisations will independently implement a sales system for their sales function, an Enterprise Resource Planning system for their finance and manufacturing functions and THEN realise that had they taken an enterprise wide view of what they could do with the data, they could have provided themselves with new capabilities such as availability to promise, cross selling offers, creditworthiness and debtor information at the point of contact with client rather than after the event.

There's no doubt that in recent years the Information Technology industry has delivered a lot – perhaps too much. The ability to capture and process huge and complex data volumes has outstripped our understanding of how to exploit it. This is a common pattern in modern business; the technology runs ahead before we realise what it is really good for and before we've changed our ways of working to ensure we're able to use it effectively.

Regulatory and compliance requirements add another layer of complexity. An ever increasing number of US and European laws and regulations mean thousands more documents covering governance and compliance procedures. Unfortunately many organisations have focused on creating compliant processes for the storage, disposal and availability of data rather than on taking advantage of the effort to create ongoing good governance and drive performance through good data.

The challenge is to find a way through this 'data overload' and use technology to deliver enterprise-wide data transparency. Managers must ask how their Information Technology can be used so that their people become more proactive, developing insight and foresight rather than basing their work on hindsight. How can they obtain a single view of data across and between customers, stakeholders, suppliers and employees?

What cultural changes do they need to make to establish the trust and confidence that will engender this transparency between their organisation's leaders, its employers, their peers and shareholders? For example, one of the world's largest airlines has worked with Capgemini to embed a data culture into its organisation. The company has one of the biggest and most expensive data warehouses in the world and sought to cut the costs of managing it. The data warehouse was seen purely as an IT problem rather than as a business asset.

Capgemini worked with the airline to turn around this mindset, explaining that by focusing purely on the cost of data warehousing a huge opportunity was being missed. By making intelligent use of the data, rather than counting its cost, the airline could build a much broader understanding of its customers, enabling it to sell more and drive more business. The key was to make the issue 'real' to the airline's employees; to allow them to see why better use of data could increase customer satisfaction and improve supply chain relationships.



How do you know where you are?

As with any journey, it is critical to understand the start point, the end point and critical landmarks that will allow the evaluation of progress. To help organisations plan their journey, Capgemini has developed a simple four-level model, that can be used to both define an organizations' starting position and expected end position, as shown in figure 1.

The model defines four sequential levels; Data, Information, Insight and Intelligence. An organisation wanting to get to the top level Intelligence will need to progress, depending on its starting point, through the Information and Insight levels as a prerequisite.

- **Data** – data is uncontrolled and fragmented across processes and systems. Typically organisations at this level focus on data gathering but not on data analysis. They may have sophisticated CRM and ERP systems in place, but will struggle to easily identify their customers, the true return on a new advertising campaign or service initiative, or how many people they employ at a particular moment.
- **Information** – the organisation and use of data is controlled. Organisations at this level have control and visibility of the data that is available in the organisation and are able to confidently make decisions based on that data. They are able to answer queries such as identifying their customers or employees.

- **Insight** – data is used to generate insight and value and the organisation is able to proactively respond to changes. Organisations at this level don't suffer from excessive data; instead they have developed insight that gives them focus on key and relevant pieces of data.

They are typically spending less on IT because they have simpler, transparent, more connected IT systems. They are exploiting data by embedding into core business processes.

- **Intelligence** – the organisation is able to bring consistently and easily together a wide variety of data and use that data to drive both operational and strategic change. Organisations at this level will be Information-centric companies that have learned to decide on their information needs before any IT transformation takes place. They understand what information, people and processes are required to deliver strategic objectives or to add value to the organisation.

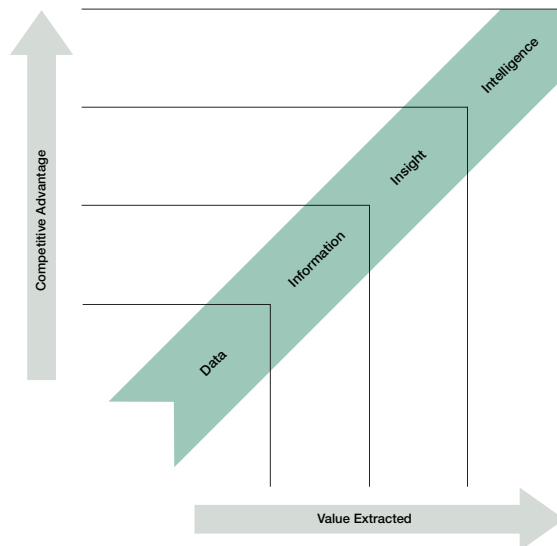


Figure 1 – Four Level Model; helping organisations to plan their journey

The journey is worth making

But how do you turn your data into business-critical information that allows you to pursue improved business effectiveness, and guide strategic decision making? How do you turn your data into information and from there into insight and then intelligence?

Let's start with defining what success is. What does 'good' look like in a world flooded with data? Dell founder and CEO Michael Dell says; "Rather than closely guarding our information databases, we gave the same information to customers and suppliers – bringing them inside the business. This became key to what I call a virtually integrated organisation linked not by physical assets, but by information."

He is describing what Capgemini terms an Intelligent Enterprise; one which uses information to help its people drive business advantage from its processes and technology. An Intelligent Enterprise will:

- make more and smarter decisions, whether automated or judgement-based, proactively responding to its environment;
- use an integrated view of all information (supply chain, customer, internal etc.) to efficiently model, link and recombine the key components of its business or organisation; and
- create sustainable and measurable cashable returns (and shareholder value) by exploiting information to attain tactical and strategic business or performance objectives

Industry Examples

In Retail – Tesco and Wal-mart have clearly demonstrated the benefits of becoming Intelligent Enterprises. They have invested in putting better data and information at the heart of the way they work and in ensuring they have highly numerate managers across their businesses. Tesco has taken and developed insight from the information it has on 12 million ClubCard holders and added creativity, value and scale to attain market dominance in the UK. Wal-mart has a transparent information chain linking store inventory to wholesalers and suppliers to minimise the amount of stock it has in its supply chain and optimise the portfolio of goods it has in every single store.

In Financial Services – many organisations are actively profiling their customers, using both internal and external data, to better understand their customers propensity to buy, propensity to switch and propensity to claim. The organisations that are able to successfully exploit this intelligence should be able to achieve superior business outcomes as a result. A good example of this is a retail bank that Capgemini worked for which has been able to dramatically improve its cross-selling effectiveness through using techniques such as propensity modelling, driven from a truly consolidated customer view.

In the Public sector – the DVLA has been able to dramatically improve the effectiveness of how it manages the taxation renewal for motor vehicles. Previously, customers had to present a set of physical documents at DVLA offices or at a Post Office for validations prior to the issue of a tax disc. Through the better integration of vehicle, motor testing and insurance databases, this

can now be achieved automatically over the Internet or via the telephone.

So what more, in reality, can an Intelligent Enterprise achieve than one still focused purely on controlling and managing data?

An Intelligent Enterprise will have asked how effective its organisation is at managing and using information; gained some insight into where the value lies now and in the future; identified 'root causes' of poor information so processes and activities can be stopped or improved to deliver cashable benefits; and resolved the cultural issues driving poor management of data and information. It will have developed a model for shared information management so that a single balanced view of performance and opportunities can be achieved enterprise-wide.

The result? Well, let's look at Dell which reports a quadrupled IT ROI from \$400 million to \$1.4 billion and a reduction in IT expenditure from 2% of revenue to 1.4%. Or Wal-mart, where IT spend is less than 1% of revenue. Of course it's not just about achieving impressive savings; both Dell and Wal-mart have also been successful because they understand the power of information.

A leadership that uses its internally-held data to respond proactively rather than reactively to the business or political climate will achieve competitive advantage. This same leadership will have instilled a culture of trust and confidence at every level in the organisation so that people can – and will – make effective information-based decisions. They will all be part of the Intelligent Enterprise.

Starting the journey

How do you become an Intelligent Enterprise? How do you move your organisation from one that is managed by hindsight to one that is managed with foresight? What cultural changes do you have to make to ensure the intelligence you hold within your enterprise drives improved business effectiveness and business performance?

Capgemini recommends that organisations setting out on this journey undertake it in three stages:

1) Diagnosis – as with any journey, it is important to be confident that you know the where you are starting from, where you want to end and the key principles that will guide you. This needs to be considered across a number of interrelated dimensions including areas such as data management, governance, information security, culture, policies and procedures and information system maturity.

2) Information management strategy – this will define the route that needs to be taken. It will define the key phases and steps of the journey together with a supporting business case.

This should cover critical information in all its forms such as data, paper, email, electronic documents and web content.

Information is often an afterthought when major organisational changes are made, yet information works across the traditional view of people, process and technology. To achieve the Intelligent Enterprise information must now be seen as an equal partner in the journey, as shown in Figure 2.

3) Execution – this involves the implementation of the strategy to deliver the anticipated benefits. It is important that as part of this stage, that thinking about solutions from an enterprise-wide, information perspective becomes natural. For example, when a new system such as ERP or CRM is rolled out, an Intelligent Enterprise is one that designs and builds in the ability to extract insight from data right at the start of the process, rather than working out how to do it after the system has been implemented.

The journey will engender significant changes to an organisation and its culture in particular. It demands that an organisation's information management moves beyond the remit of the IT department to be jointly owned by commercial functions. It requires the business to share details of KPIs, hierarchies, strategic plans and resource allocation and more with the IT function. It needs a re-focus on the information that will make a commercial difference. And it requires that focus to be enterprise-wide to ensure IT delivers the capability the business needs for success.

In its work with the global airline, Capgemini held workshops to encourage this change in mindset and to dig deep into the current data culture. Employees who previously didn't know how to use or interpret the information at their fingertips were given the skills to do so. Data governance and data quality responsibilities were formally written into senior management job descriptions. This was a major cultural shift and one that other organisations moving towards an Intelligent Enterprise approach will also have to make.

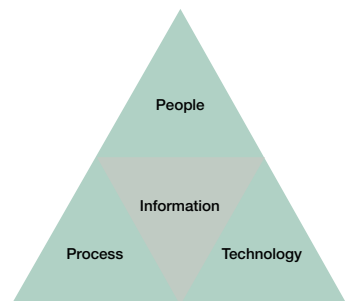


Figure 2 – Achieving intelligence requires a holistic view across people, process and information

Making information count

Cultural change has to be carefully managed, especially when we work in geographical or functional silos. There is a natural desire to protect one's own domain – to report only the good news and not the bad or perhaps to cloud the truth. “If the Board knows what's really going on, will they start to interfere?” Some organisations have a blame culture which prevents their staff from making decisions other than by consensus for fear of making a mistake. These organisations will often analyse in great depth, perhaps using sophisticated Six Sigma or other valid methods as a basis of decision making when an earlier and often better decision could have been made with the information already available.

Finally, the key component to successful cultural change must surely be to establish trust. If you have invested in your people so that they have the right skills to exploit information, they must be allowed to use that information confidently and to report truthfully without recrimination. We also know that if users don't trust information sources, they will not use them – either as consumers or contributors – and expensive systems can quickly spiral into decline and lack of use. It is a leadership imperative to establish the trust: to drive a culture where shared information leads to a single version of corporate truth. This is perhaps one of the biggest challenges in the journey towards becoming an Intelligent Enterprise.



About Capgemini and the Collaborative Business Experience

Capgemini, one of the world's foremost providers of Consulting, Technology and Outsourcing services, has a unique way of working with its clients, called the Collaborative Business Experience.

Backed by over three decades of industry and service experience, the Collaborative Business Experience is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and collaboration-focused methods and tools.

Through commitment to mutual success and the achievement of tangible value, we help businesses implement growth strategies, leverage technology, and thrive through the power of collaboration.

Capgemini employs approximately 61,000 people worldwide and reported 2005 global revenues of 6,954 million euros.

More information about our services, offices and research is available at www.capgemini.com.

Capgemini: a leader in creating the Intelligent Enterprise

Leading organisations are exploiting information to shape their destinies and drive sustainable business results. Capgemini has the breadth of expertise to act as a guide and partner for organisations as they make the journey to becoming an Intelligent Enterprise.

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