The Right Information:
Leveraging Information as a Strategic Tool

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Abstract

Information is available faster, and in greater quantity than ever before, at nearly every level of the enterprise. However, many organisations could make better use of this information to leverage strategic advantage.

To improve strategic use of information, information from disparate sources must be presented in a consistent and timely manner, along with an indication of completeness. The ability to summarise information across organisation and geographic boundaries is also critical in identifying and managing risks and issues as early as possible.

This paper reviews the challenges of defining a model for controlling the information deluge, and suggests a structure and related processes to enable information to be used more strategically.

Introduction

Strategic Information Management: is it just another management trend or a bid to gain competitive true advantage from the information flood spread across most organisations?

According to the Accenture Institute for Strategic Change,

"Businesses are awash in information. And most firms recognize that using it effectively is central to their success. Organizations from financial institutions to pharmaceutical firms are expanding their data warehouses and upgrading their IT infrastructures just to manage the torrents. Companies have spent millions on improving their technology, but most haven't gone far enough toward leveraging information strategically. While most use information to support their current business model, they lack focused strategies for leveraging it to break out of the competitive pack."

Source: "Capping the Gusher: Turning Information Torrents into Competitive Power" by Jane C. Lindner, Edward Sarnowski and Joyce Leung. © 2001 Accenture · Institute for Strategic Change

The authors go on to discuss how the strategic use of information is a key competitive differentiator, and report on a survey conducted in order to determine whether and in which ways organisations use information strategically.

The report recommends five levers for gaining a competitive edge:

- Shift value chain focus
- Raise the analytic ante
- Integrate pervasively
- Tune in for impact
- Develop distinctive, new information assets

Research from The Gartner Group takes a different route to arrive at a similar conclusion. The Gartner team uses the term 'Real-Time Enterprise' (RTE) to describe an organisation able to take better decisions and more focused actions by reducing the time to respond to business and operational inputs.

The Real-Time Enterprise can be defined at three levels:

- At operational level, the main benefits are improved customer service, reduced inventory, risk reduction and lower process costs.
- At managerial level, the main benefits are faster exploitation of emerging opportunities, less damage when things go wrong and increased agility when dealing with large and small threats and changes.
- At leadership level the main benefits are faster implementation of the strategies that are needed to meet changing circumstances.

Source: www.gartner.com

While it is neither feasible nor desirable to attempt a large-scale change in the way in which a large organisation responds to every input, it is beneficial to improve selected key processes using more timely, consistent and visible information that is available to all relevant parts of the organisation as soon as it becomes available to one part.

This paper reviews some of the challenges that are likely to arise in attempting to transform the way in which an enterprise uses information. The topics discussed include:

- Enabling better collaboration and communication
- Defining a strategic information architecture
- An implementation scenario - managing programme risk and performance

An important factor to bear in mind is that the techniques, architecture and processes discussed in this paper do not require a 'big bang' delivery – they can be applied within individual business units or divisions and adopted progressively.

Collaboration and Communication are Key

Most current-generation information systems are capable of operating with real-time data. However, many have not necessarily been implemented to do so. Some operational processes may also rely on inputs from earlier-generation systems ('legacy systems') that are not designed to function in real time. Therefore, even when business process is optimised from and efficiency and cost perspective, senior managers often lack a consistent view of all relevant information to make key decisions.

Furthermore, the information they do have may be delivered in a variety of formats from diverse sources without an indication as to how timely or complete that information may be.

Many new e-business initiatives, including employee self-service, automated customer services and electronic procurement, for example, are based on technologies that enable real-time activity. However, integration of these capabilities with legacy systems that are not real-time has often reduced the ability to achieve real business performance benefits.

The widespread adoption of 'always-on' networking via the Internet as well as the use of mobile devices offers the opportunity to improve both the speed and the value of the information generated across the organisation, while also providing the ability to include suppliers and customers in selected processes on an 'any time and anywhere' basis.

Improving the usability and relevance of information presented to decision-makers needs to be tailored to the processes being monitored, whether horizontal or specific to a profession or industry.

Horizontal processes that can be managed strategically might include:
- Programme and project reporting, including performance and financial indicators
- Balanced scorecard reporting across different business units and geography
- Tracking and measuring the performance of marketing and sales initiatives
- Managing performance of service suppliers and contractors

Some vertical processes conforming to the same type of model could include:
- Legal: case management, mergers and acquisitions, major litigation
- Financial: customer service, product launches
- Health Care: resource allocation, risk management, claims management
- Construction: multi-site projects, relocation programmes
- Professional Services: contractor management, project delivery

All of these examples can be measured in terms of a number of standard metrics, many of which may be described differently depending on the subject process and sector.

For example, strategic measurement of programme performance might use metrics on resources, milestones, issues and risks. Monitoring service management might look to measure problems, time to resolve, resource usage and recurrence.

Regardless of the terminology, there are two common threads:
- Measuring capital and operational spend is an 'always present' factor
- Measurement of business benefit or success is critical in supporting decisions to refine or adjust strategy on an ongoing basis

An additional consideration in managing strategic information: few large enterprises engage in only one activity. Therefore, factors that are meaningful at a divisional or line of business level may be different from those needed at an enterprise or group level. The architecture and processes adopted must be easily configured to accommodate different requirements.

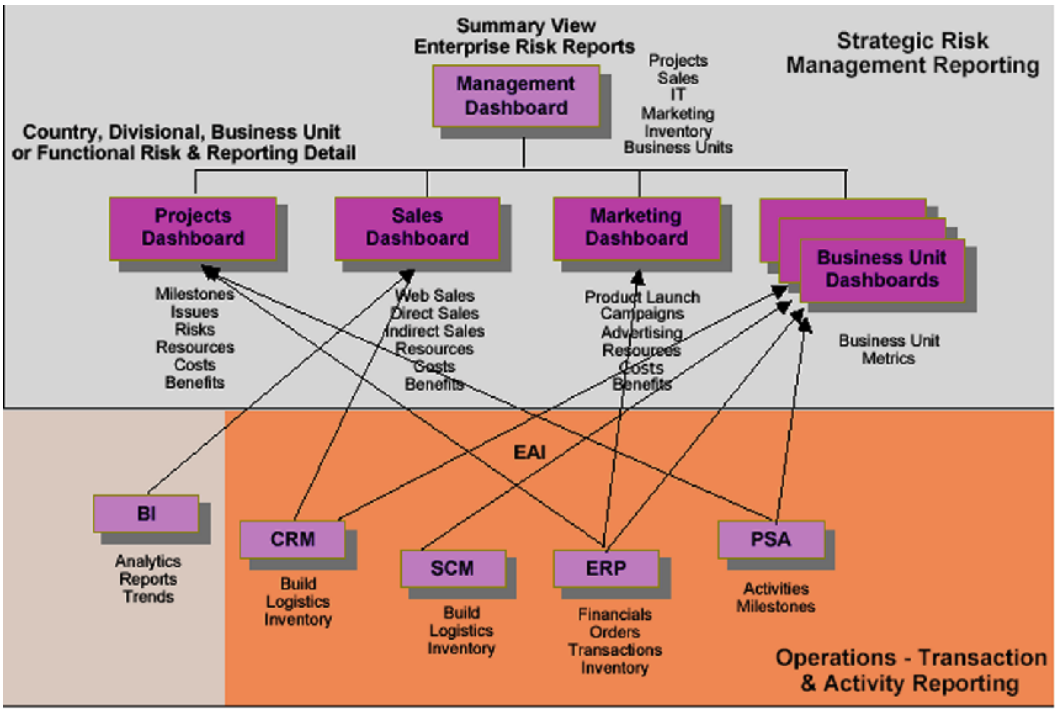
Competitive advantage can be achieved through several initiatives:
- Integration of data from key operational systems into an interactive dashboard, supported by business rules capable of instantly advising the viewer as to the timeliness and completeness of the data displayed
- Use of standardised templates for the integration of non-operational information such as milestones or targets, issues and risks
- Favour visibility of information rather than control – this will enable viewers to focus on where the business is going rather than where it is right now

Strategic Information Architecture

In order to use information strategically, it is critical to define an architecture that will accommodate different data flows, along with the rules needed to ensure visibility of information in a timely manner. Additional rules enable the parties viewing information to determine the degree to which the information they receive is complete.

Different business functions or organisational units will need different measurements, as discussed previously, and will also need the ability to tailor the underlying rules to their own business requirements. Therefore, there may be several different dashboard displays available to different operational or geographic units.

It is entirely feasible to include an enterprise-level dashboard that summarises these different divisional or regional displays with key operational information or performance indicators, as illustrated in the following graphic:



The illustration is indicative of the types of integration that need to be catered for in defining the strategic information architecture. The goal is to determine the indicators that provide management with both a view of where they expect the business to be, as well as the sources of data needed to validate whether or not those expectations are being realised. Links indicated between operational systems and the various information displays are meant to illustrate possibilities; they are far from exhaustive.

Defining the basic architecture is relatively simple. A variety of standards exist for information sharing, as well as a good selection of tools for managing the required links. What is critical is flexibility – for the solution to provide value, it must be easy to integrate securely with both internal and external data sources, and to implement changes to those integration points rapidly.

Implementation Scenario – Programme Performance

The process of defining an information architecture can be defined in three phases.

First, determine the key indicators the will make information about the underlying processes meaningful, and the means by which data will be captured.

The examples used here describe information about programmes and their component projects, but other processes are handled in a similar fashion.

Define Key Indicators

- Risks:
  Captured from structured form online. Usually categorised as business, competitive, technical, operational etc. Information about risks should also be ranked in terms of potential impact on delivery (e.g. high, medium or low). Risks are attached to project or programmes. Each risk has an assigned person and a due-date for resolution or recommendations.
- Issues:
  Managed as above.
- Milestones:
  Captured from a baseline template project management file, which can be supplied using a project management tool or a simple spreadsheet. The assigned project manager will be responsible for setting the baseline (describing milestones and due dates) as well as supplying updated reporting against those milestones.
- Resources:
  Initial resource plan can again be captured with milestones using a template. Actual resource usage against the base plan is ideally captured from a time and expense system if available. In the absence of a time reporting application, the original template can be modified and used to record actual resource usage.
- Financial:
  Base financial information is captured through an online form in three segments: - the planned expense spend, by expense category, in monthly outflows - the planned capital spend, by asset category, in monthly outflows - the planned amortisation charges, by asset category The above breakdown provides for capture of ongoing impact to both P&L and balance sheet. The planned spend will then be validated against actual spend on an ongoing basis through a feed from the relevant financial systems showing payments made and charges posted to the appropriate ledger accounts.
- Benefits:
  Base benefit information can be measured in terms of cost savings, increased revenue, improvement in margin or increase in market share, for example. Here the challenge is to determine which of these indicators provides the most timely and strategic view of performance, and then define a feed from the data source best positioned to verify the planned benefit – for example, if the metric is cost reduction, then the feed would be taken from the appropriate financial system.

Define Dashboard Rules

With the relevant measurements defined, the next step is to set up the rules that generate the information to be displayed. There are two categories of rules:

- Completeness:
  A project and programme reporting cycle is defined (see below). The rules associated with the dashboard are used to alert the viewer that information expected within the cycle (progress reports, risk and issue resolutions, etc.) have been delivered to the system. The completeness rules also are used to display occurrences of missing or late information in different colours (green, amber, red) to highlight those areas that require attention.
- Validation:
  The display also can issue warnings according to a second set of rules. An example of a warning would be an indicator showing red when the recorded spend exceeds planned spend by a given percentage, for example.

The notion of an integrated dashboard includes the ability to drill down and see detailed information about any of the summary information presented. This means, for example, that if high-impact risks are not resolved by the target date, it would be possible to drill down from the display showing how many such risks are 'red' and view the individual risk entries and status as reported by the person assigned to manage each one.

Specify Roles and Cycles

The final step is to identify and create roles for each of the participants in the programme cycle. This can be done by defining profiles, and then attaching users to one or more such profiles. A profile determines the user's privileges – what they can view, what they can modify and what they cannot see.

Profiling can also be used to allow users across organisational or geographic boundaries to view information in related projects within a programme without being able to modify that information.

A typical list of roles might include:

- Administrator:
  The access level needed to create programmes, profiles and users, and to assign users to roles. The administrator role is also responsible for implementing modifications to dashboard rules.
- Programme Manager:
  The access level allowing the definition of projects, and the assignment of project managers within the programme. Programme managers typically define the reporting cycle for all projects within a programme.
- Project Manager:
  The level allowing a user to set up a project, as well as enter or upload baseline data and update that data. Project managers can also upload attached documents, so that any user with 'read' access to their project can share information stored in external files. This is a key benefit, because the access level to attached documents matches the access level for viewing project control and financial data.
- Programme or Project User:
  a 'read only' access level, enabling a user to see all information and attached documents for the specific project, or for all projects with a programme.

Roles might be further refined using additional profiles to create dashboard views that are limited to a given country, business unit or external supplier or partner.

Perspective Solutions delivers information management strategies to enterprise customers globally.

Perspective and its partners represent many years' experience in defining corporate information programmes and the underlying technologies required to ensure value and business benefit.

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