Harte-Hanks Trillium Software®
2005/6 Data Quality Survey

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Executive Summary

Directors of large organisations recognise that information brings competitive advantage. They spend many millions of pounds every year seeking to make better use of customer, supply and financial information often through investments in Customer Relationship Management (CRM), Supply Chain Management (SCM) and Business Intelligence (BI) initiatives. Management must also ensure that information held on computer systems is fit to support the legislative corporate compliance obligations of their organisation.

This survey indicates that despite these strategic requirements for quality information, only a minority of companies (14.5%) tackle data quality at a strategic, enterprise-wide level. Most companies (51%) manage the quality of the data behind their key information requirements through frequent tactical projects, department by department or requirement by requirement, without any total enterprise-level strategy.

Thus it would appear that a strategic need for good information is led not by strategic planning, but by ad-hoc tactical projects.

Participants to the survey indicated an opinion however, that with time their organisations would begin to adopt strategic enterprise-level data quality practices as 'best practice' (75%) and that their top management would drive this forward (79%).

Objectives

The overall aim of this survey is to understand how data quality is managed in large organisations today, and how it might be in the future.

In particular, are today's initiatives mostly tactical or mostly strategic? Do participants foresee this changing? Who manages the initiatives now and at what level within the organisation might initiatives be managed tomorrow? Which business areas are being tackled? Is data quality measured or not?

Methodology

During 2005 and early 2006, a survey was carried out by Harte-Hanks Trillium Software involving a sample consisting of 216 attendees from large companies at data quality and data management industry events around the world. These events included DAMA, IDQ, Compliance, BI, IQ Network Forum, ARK Group's data quality conference and others. Survey participants had responsibility and/or a need for data quality and were focused on CRM, data warehousing, compliance, data and database management and IT project management.

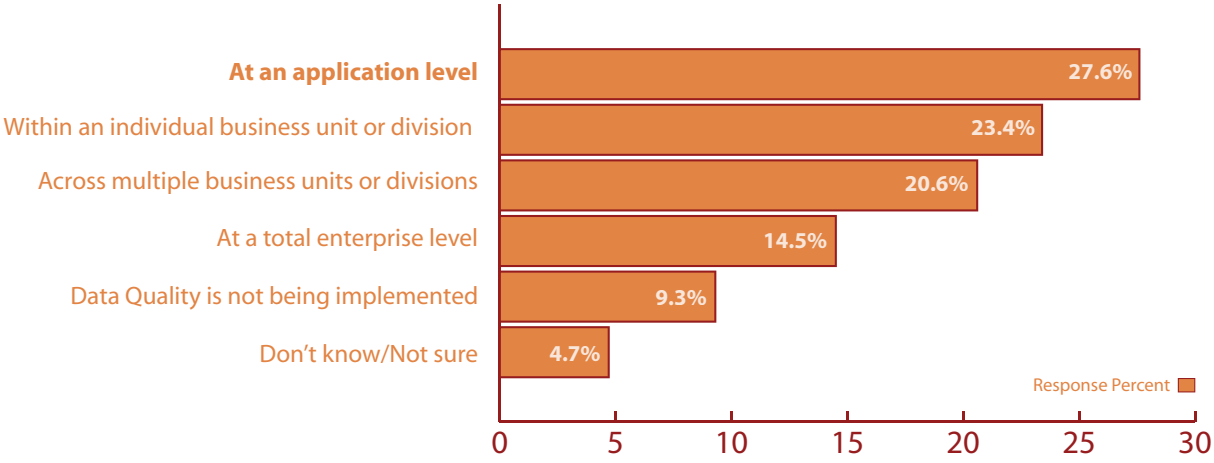
Eight questions were asked of each respondent. Questions 1-5 required a single choice of structured answer, while questions 6-8 allowed multiple structured answers to be selected. The questionnaire was provided on paper and online. A copy is available from Trillium Software upon request. Please contact the marketing department.

Participants were volunteers and completed the survey themselves.

Findings

Each question, the results and our interpretation of those results, question by question is presented in this report.

1. How is data quality currently implemented in your organisation?



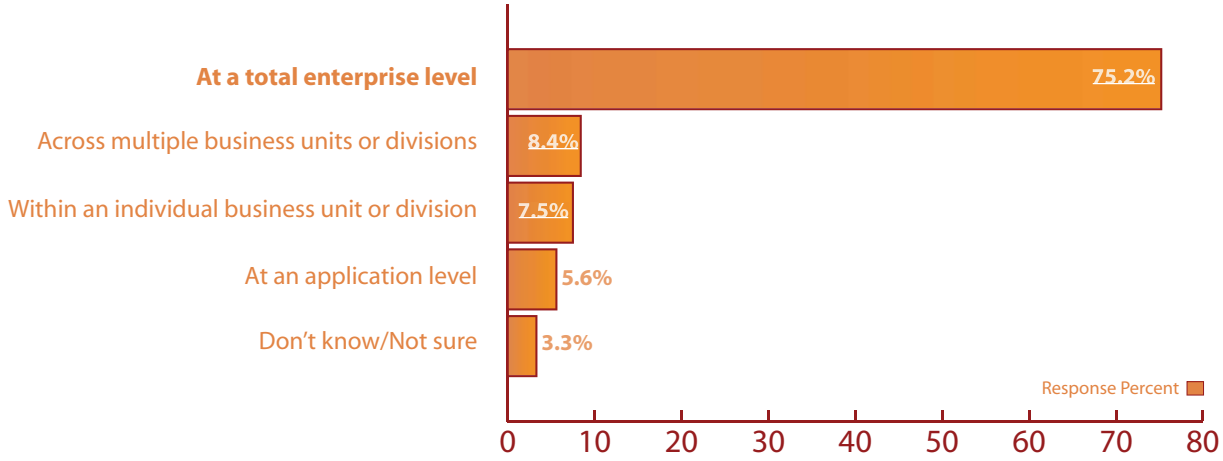
This question seeks to determine whether respondents believe data quality is currently treated more as a tactical issue or as more of a strategic enterprise issue within their organisations. The results indicate that some 51% of respondents perceive that today, their company is implementing data quality at either an application level or project by project within individual business units and divisions. With only 14.5% suggesting the strategic answer of 'at the total enterprise level' and some 21% proposing they do span multiple business units, it would appear the weight of activity is tactical.

Seeking further interpretation, we might propose that such tactical implementations are likely to be isolated point projects supporting investments in new applications such as CRM, data warehouses and the supply chain.

Increasingly, Harte-Hanks Trillium Software is observing that point data quality implementations, while working at that tactical level, do little to support an enterprise view of the business, its customers and supplies. Improving data quality at the individual silo level, also does little to prepare that data later for enterprise integration, since the standards used are often inconsistent.

Note: chart based on a total of 214 respondents

2. How do you think data quality should best be implemented?

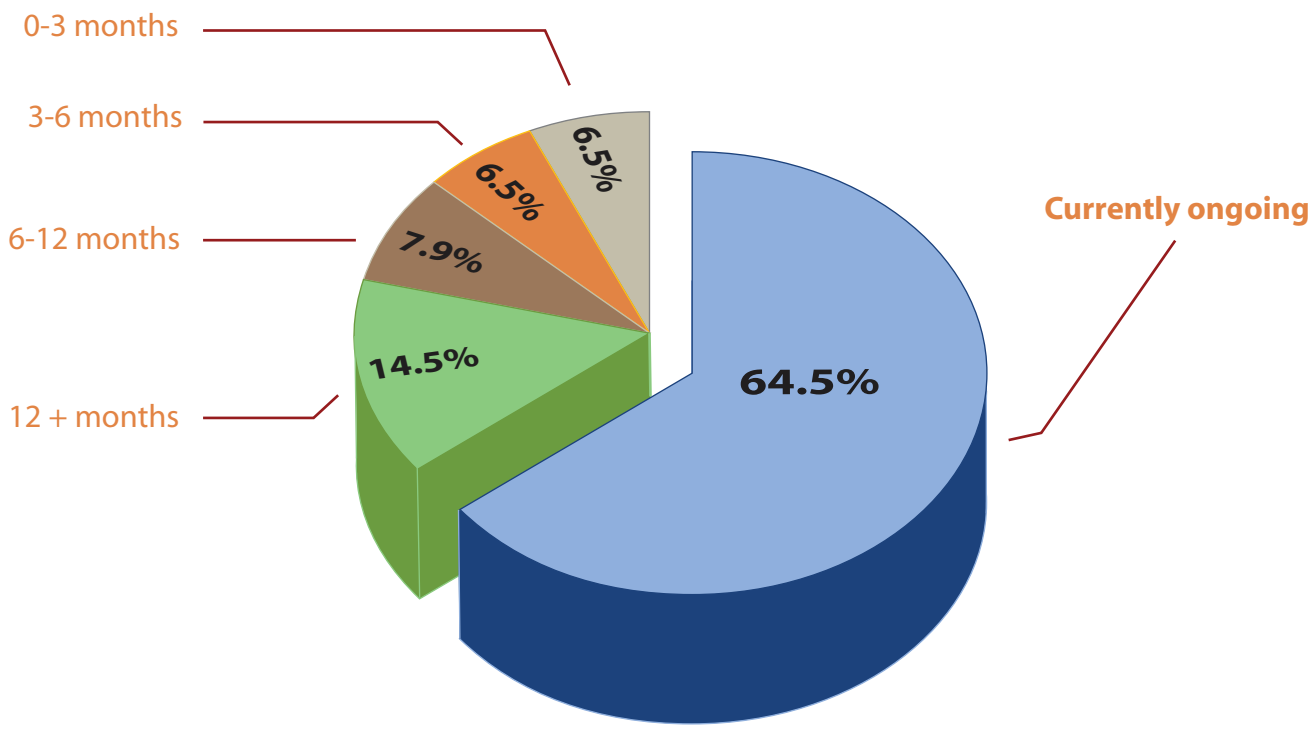


Through this question we seek to determine whether respondents believe a more tactically driven (application/division or unit) approach or a more strategically led (multiple unit/ enterprise-wide) approach to data quality is best. Clearly the majority, over 75%, believe data quality should best be tackled strategically. Only 13% favour the tactical options of by unit or application level. This contrasts the findings in question 1, that data quality is today most often actually tackled as a tactical activity.

Participants support the notion then, that fundamentally, data quality cannot be tackled effectively by IT working from problem to problem, solving issues data silo by data silo with no grand plan. For data quality initiatives to become enterprise-wide undertakings, executive level sponsorship will be required for the creation of centres of expertise and the implementation of methods, processes and procedures across business divisions. Collaborative modes of working between data owners and data quality practitioners will be needed if conflict is to be avoided.

Note: chart based on a total of 214 respondents

3. When is your organisation likely to commence a data quality initiative?

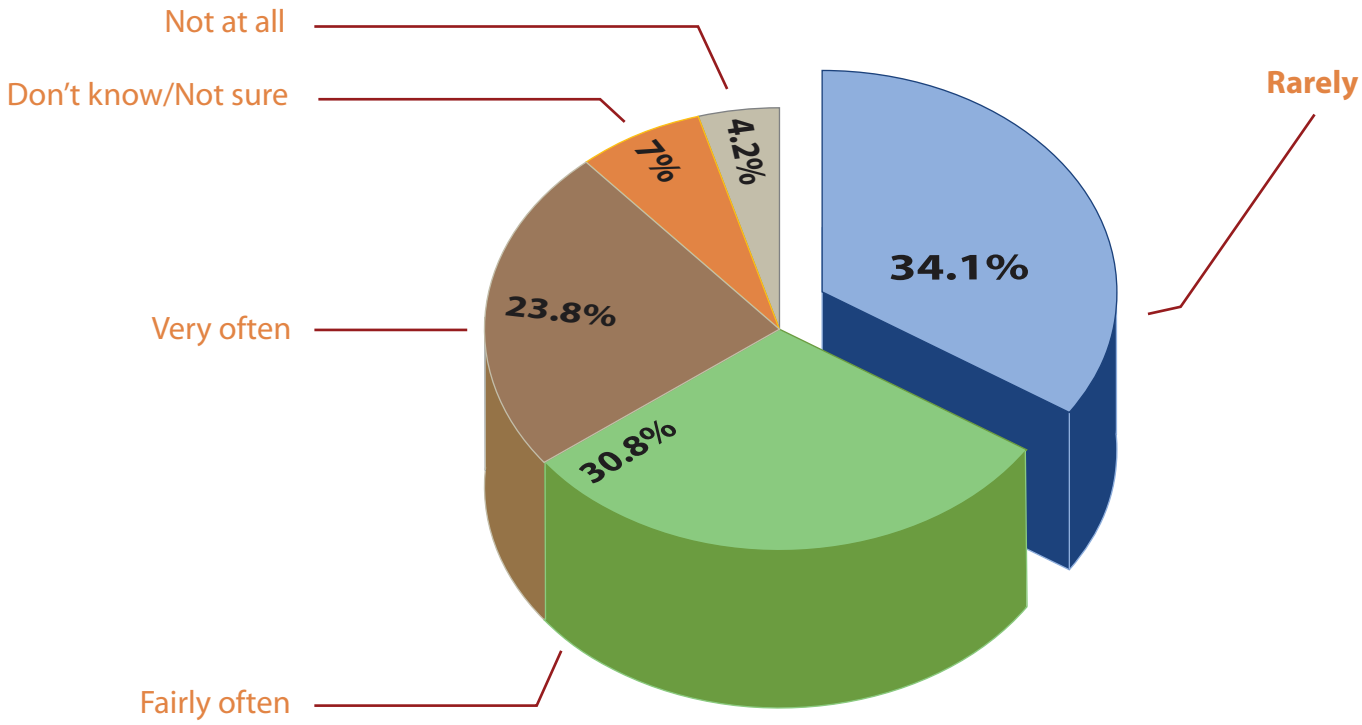


The results suggest the majority of people surveyed (65%) come from companies already undertaking data quality initiatives. Additionally, some 21% of the people surveyed believe that their company will first undertake implementations within the next 12 months.

That so many companies have initiatives underway or will have within 12 months, when at the same time the majority are driven by tactical projects (that are presumably short-term in nature), suggests that many firms are constantly moving from one low-level data quality implementation to the next and probably have many separate projects ongoing at any one time. Such initiatives may work at an individual application or business unit level. But if data standards and methods used across the business are inconsistent and they later attempt to consolidate data to say, gain a single view of the customer or of supplies, then they will still have a problem. They will need to define enterprise data quality standards and revisit every silo with another data quality project to align them all to an enterprise standard – perhaps then seeking to define and implement Master Data Management (MDM) initiatives.

Note: chart based on a total of 214 respondents

4. In your organisation, how often are data quality initiatives driven by demands from business management?

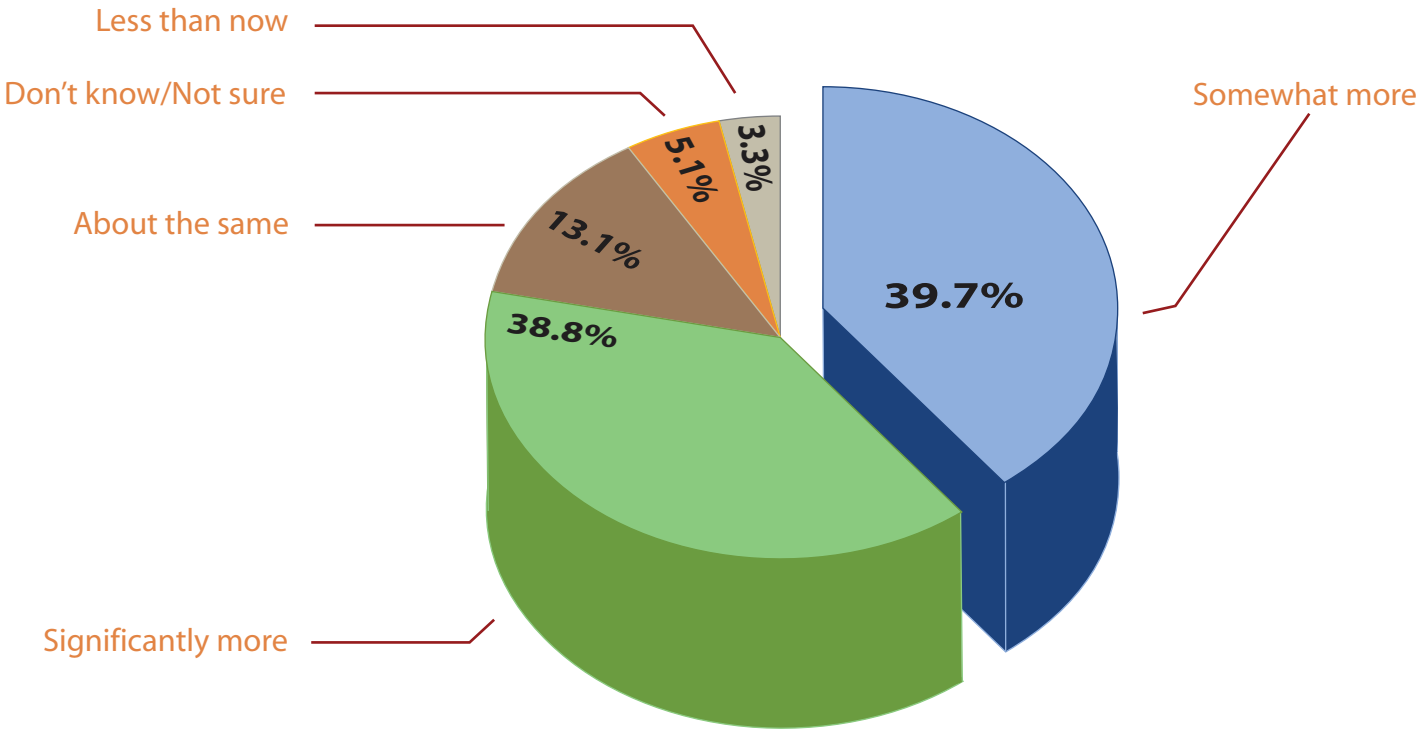


It would appear from these responses, that the perception of the degree of management involvement is varied. While we might suggest that in 55% of cases (31% + 24%) management is often involved, 38% suggest management seems to have little or no involvement in their view.

From the experience of Harte-Hanks Trillium Software, these results suggest that management has an interest in BI, CRM, SCM and corporate compliance on a project by project basis and that these demands from business management drive data quality; likewise on a project by project basis. However, given the answers to question 1, there is little evidence of management sponsorship across multiple business boundaries.

Note: chart based on a total of 214 respondents

5. How do you see business management driving data quality in the next 2 years?



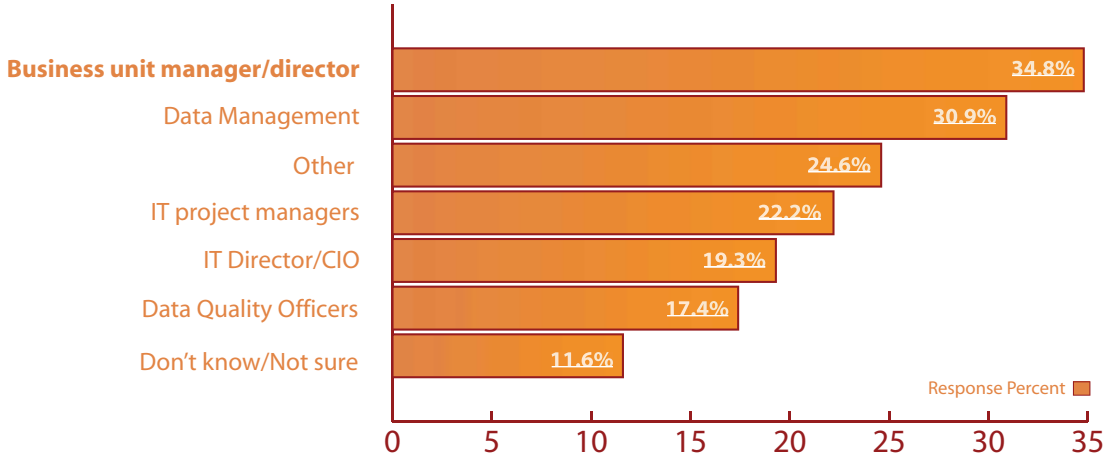
Most respondents (79%), propose that over the coming two years, business management will drive data quality somewhat or significantly more than they do now. This finding would support the results from question 2, where we observed that respondents feel that data quality should best be implemented strategically and more broadly across the enterprise.

Involvement from senior business management will be necessary for strategic implementations because they have the vision to see beyond the needs of an individual unit and the authority to sponsor corporate-wide initiatives. Only management can create the new 'best practice' procedures and processes for data governance that will have to span the organisation for enterprise approaches to be realised.

Management is likely to be becoming increasingly aware of the importance of good data for compliance. This is especially so in the financial services sector where anti-money laundering, Basel II risk management initiatives and efforts to combat identity theft and fraud all demand good data. Increasing realisation of the critical role of data quality to winning a return on investment from Customer Relationship Management (CRM), Supply Chain Management (SCM), Enterprise Resource Management (ERP) and Business Intelligence (BI) expenditures are increasing management awareness too; especially in the light of many high profile failures. The importance of good data quality to support Radio Frequency Identification (RFID) is now becoming clear too.

Note: chart based on a Total of 214 Respondents

6. In your organisation, who has responsibility for data quality?



At first glance, the chart suggests respondents feel that in the main, business unit managers and business directors hold responsibility for data quality. However, the remaining job titles are then mostly IT related, meaning that overall, respondents see IT as having the leading role.

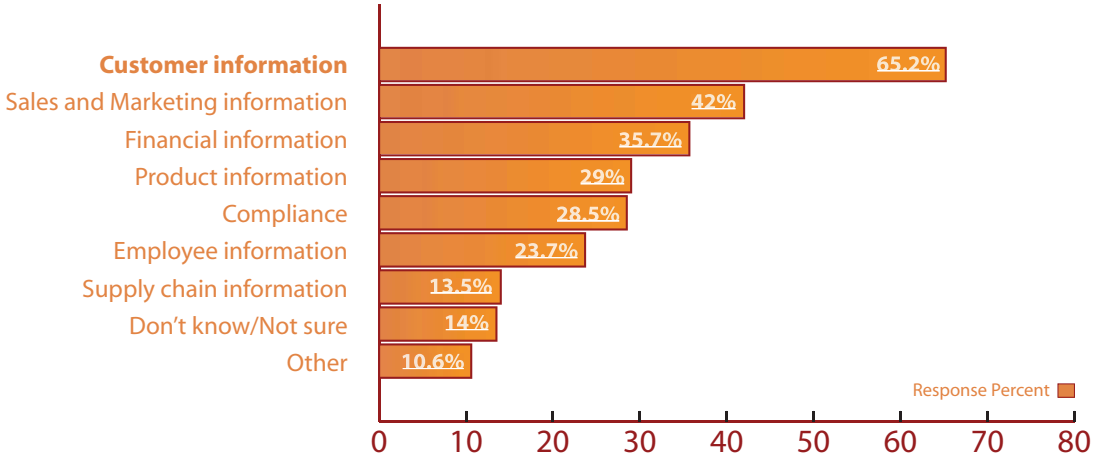
Further analysis of the detail offered by those 25% of respondents who answered 'other,' shows that a third of these suggested 'nobody' or 'everybody' while half gave various differing job titles of IT people and business managers at business unit level.

The diverse answers to this question show that responsibility for data quality is not well defined. Outside of companies employing dedicated data quality officers, it seems likely that data quality is not a clear job responsibility of any role. If nobody is truly held accountable, then how can enterprise data quality be improved?

Realistically, whoever is appointed to manage data quality, they cannot do it alone. Sharing data across the business requires establishing clear and consistent standards. Initiatives such as for MDM require collaboration at multiple levels and across business disciplines. IT as the providers of computing services and business units as owners of the data, must be brought to work together.

Note: chart based on a total of 214 respondents (multiple responses accepted)

7. Do you currently have data quality initiatives in any of the following [given] areas?



Clearly customer, sales and marketing oriented information are the key drivers for most businesses. Perhaps this is because all businesses need good customer data and errors in it manifest themselves very visibly in terms of returned mailings, ineffective call centre operations and poor results from CRM and market analysis and marketing campaign investments. Indeed according to Gartner Group, some 50 percent of CRM projects are not living up to expectations, mostly due to a lack of attention to data quality.

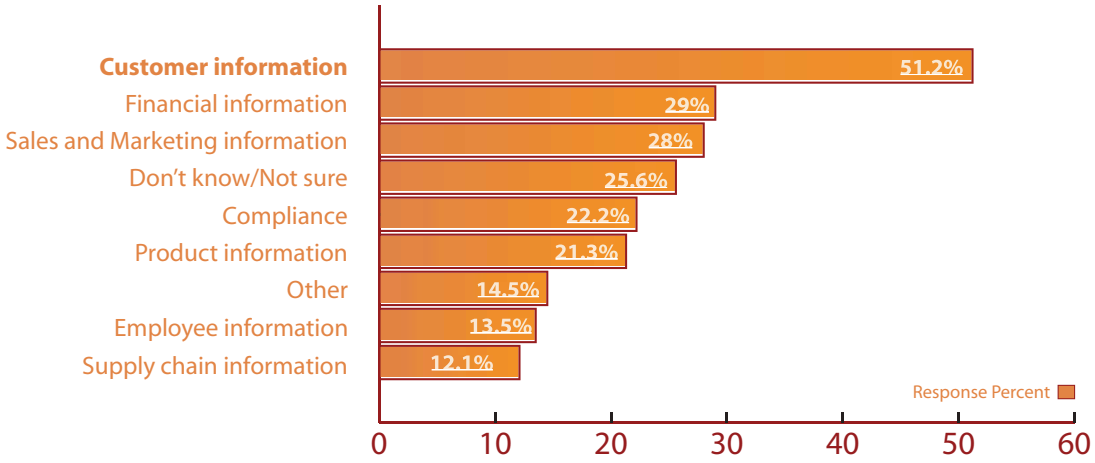
With financial compliance pressures increasing, it is no surprise that data quality initiatives surrounding financial information appear to be the next most common area. Under the Financial Services and Markets Act, directors of public limited companies can now expect to be held personally responsible for the announcements they make to the market. In financial services, where the pressures are perhaps greatest, industry analyst META Group[1] estimated in 2005 that a large bank could spend up to £100 million over the next three years on IT-related compliance programmes. Basel II alone is expected to cost the UK banking sector some £2.5 billion according to research conducted by Accenture and published in Computing[2] magazine.

Product information and supply chain information are closely linked and so we can propose that overall, supply management is a key driver. Poor supply data impacts procurement, logistics, production, customers and users. It also clouds the value of sales analysis since poor data can make it hard to determine exactly which products of what specification have been sold from which outlets in what quantities. The Ministry of Defence, Defence Logistics Organisation (MoD DLO) operates one of the biggest supply chains in the world. It runs a supplies focused data quality initiative to help it ensure it sends the right goods, of the right specification, in the right quantity, to the right place, anywhere in the world, at the right time, safely and cost effectively. Bombardier Transportation discovered that it had a $135 million per annum relationship with a supplier where it had negotiated volume discounts based on just a $4 million relationship. Bombardier ran data quality initiatives in a drive to reduce procurement costs by 30% within three years.

Note: chart based on a total of 214 respondents (multiple responses accepted)

[1] Since acquired by Gartner Group
[2] Computing 27 July 2005: UK banks face rising bill for Basel II

8. In your organisation, in which of the following [given] areas is data quality measured?



In this question we sought to learn whether data quality is usually measured or not, and in which areas measurement is most likely. If strategic enterprise-level approaches are to be the future (question 2) and management are likely to get more involved (question 5), then an essential step along the way will be measuring and reporting the impact of data quality levels upon business performance.

The graph shows that where data quality is measured, it is very likely to be in regard to customer data and associated sales and marketing data. Financial information would appear frequently to be monitored for quality, no doubt for reasons of compliance, which in itself appears to be a motivator for measuring data quality in 22.2% of companies.

An analysis of the individual responses shows of the 178 companies which currently have a data quality initiative (question 7), 154 of them believe their company is measuring data quality (question 8); i.e. some 86.5%.

Note: chart based on a total of 214 respondents (multiple responses accepted)

Conclusions

Most organisations are currently running data quality projects of one type or another. Typically these are being implemented at a tactical level, rather than in a more strategic fashion. Respondents' varied answers as to who is currently responsible for data quality suggests uncertainty.

Despite current practice, the majority feel that actually, the best approach would be for data quality to be tackled more strategically; across multiple divisions and at a total enterprise level.

Respondents do believe that in the future, senior business management will increasingly drive data quality – which will certainly be necessary for strategic action and is also an indication that respondents perceive that management is beginning to acknowledge the value of good data for corporate performance and compliance.

According to our responses, most current projects surround customer, sales and marketing information, followed by initiatives around financial data. And then supply management. This is as might be expected given the drive for CRM, compliance, supply chain efficiency and related master data management in recent years.

Drawing these findings together, it would seem reasonable to conclude that there are projects of many types being run, mostly at a tactical level with no clear organisational strategy and often with no-one assuming overall control. However, as the link between good data and corporate performance and compliance becomes clearer, management is likely to drive for better data quality and will champion a strategic business approach towards enterprise data quality.