This paper is about the approach which large organisations should take toward managing unstructured content – information which typically falls outside of structured databases or transactional-based applications. It argues that unstructured content is a strategic asset and should be managed as such, not just to avoid information overload or achieve minimum regulatory compliance, but because it can yield real competitive advantage.

The paper is based on extensive research among senior IT decision-makers in large European organisations conducted by leading independent media and research company IDG.

Headline findings from the research include:

- Two-thirds of European organisations say they have unstructured content adequately managed or are making significant inroads to do so.

- However, when their attitudes, current actions and future plans are examined in detail, it appears they have not grasped the full measure of the issue. A third of organisations say they are unfamiliar with the term ‘unstructured content’.

- Of those that understand the term, many have piecemeal rather than strategic plans to deal with it. The average number of content management systems among respondents is 4.28, and just over half (58 percent) will look to a consolidation plan to deliver post-implementation strategic value.

This raises the question of whether these organisations do indeed ‘get it.’ Unstructured content is an enterprise-wide issue and requires a strategic solution.

Equally worrying, many organisations appear not to have in place the internal procedures and processes which will enable them to derive real competitive advantage from their unstructured content even if they do have an enterprise-wide approach to managing it.

If content management systems are implemented on a departmental basis, without due regard to organisation-wide procedures and infrastructure, how will they deliver their full value?

And if managing unstructured content is critical to corporate performance – and this paper argues that it is – how can performance be managed if unstructured content is left idle?
The strategy approach to managing and exploiting unstructured content

Unstructured content: definition

Unstructured content is any information not contained in a structured data system, such as a database or ERP package. This would include emails, IM sessions and other correspondence, word processed reports, requests for tender, tenders and contracts, purchase orders, invoices and receipts, in-bound and out-bound electronic and paper forms, website content, marketing collateral, such as brochures and presentations.

Enterprise content management: definition

The Association for Information and Image Management (AIIM), an independent industry body, defines enterprise content management (ECM) as “the strategies, services and technologies which enable organisations to capture, manage, store, preserve and deliver information to support business processes.”

Knowledgeworkers

Companies have spent years and large sums – justifiably – organising structured data contained in databases and transactional systems, on which the daily operations of the company depend. However, there is a vast body of unstructured information (estimated to be in excess of 80 percent of information within a business) which fuels knowledge workers in, for example, sales, marketing, R&D, human resources and strategic finance departments, whose job it is to find solutions to complex problems.

This unstructured content includes everything that falls outside of structured data repositories, such as emails, reports, contracts, invoices, electronic and paper forms, website content, images, movies, spreadsheets and presentations.

How will companies leverage these disparate and currently dormant intellectual assets and turn unstructured content to their competitive advantage?

According to IDG’s survey, 19 percent of major European organisations regard managing unstructured content as a competitive tool for improving customer service, and 42 percent see it as an asset for both business continuity and raising productivity (fig 1).

To achieve these aims, organisations will have to do more than simply implement content management systems. They will have to adopt a strategic approach to the internal procedures for managing unstructured content as well as to the deployment of systems.
**CONTENT VALUE: THE STRATEGIC APPROACH TO MANAGING AND EXPLOITING UNSTRUCTURED CONTENT**

**WHAT IS UNSTRUCTURED CONTENT?**

The perception of what unstructured content comprises is vague in the minds of many respondents (fig 2), indicating that the true nature of the issue is probably not universally appreciated.

Overall, nearly one in three respondents (29 percent) is unfamiliar with the term. An almost equal number (28 percent) identify email as the primary type, confirming anecdotal evidence that email has become a de facto content management system for many knowledge workers involved in highly collaborative tasks.

If the responses are examined by industry sector, the bias in variances becomes apparent (fig 3). In media, finance, services, manufacturing and public sector, email is most likely to be seen as the main type of unstructured content. But in retail, often positioned at the far end of complex supply chains along which flow orders, invoices and e-payments as well as goods, electronic forms are seen as primary.

Unstructured content is used in everyday business operations to learn from, inform decisions, build teams and relationships and diagnose and solve problems.

Whether or not a respondent is familiar with the term unstructured content varies by country. In Spain, the majority of respondents were unfamiliar with the term, in Germany nearly half were and in France an above-average number.

**WHAT Drives An organisation To Deploy Content Management Systems?**

Until recently, organisations managed unstructured content as a purely defensive tactic to comply with whatever governance regulations applied in their sector, and/or to prevent information overload. But now organisations are waking up to the fact that unstructured content can be leveraged to gain long-term competitive advantage, as we have seen in fig 1.

What drives an organisation to deploy content management systems is naturally coloured by the sector in which it operates, usually by how heavily regulated it is.

Overall, two thirds of respondents are driven to plan or implement enterprise-wide content management (ECM) by the desire to improve productivity or performance (fig 5), with regulatory compliance and record management motivating about one in four.

As you would expect, in the finance sector, regulatory compliance is almost as important a motivator as improving performance and productivity. In the lightly regulated but content-heavy media sector, compliance doesn’t figure at all (fig 6).
So far the picture is mixed. It would appear organisations do not realise the extent of unstructured content, but the good news is that managing unstructured content is now on the corporate agenda.

However, acknowledging unstructured content is valuable is one thing. It is entirely another to develop best-practice procedures for using it to support tacit transactions where knowledge workers add value.

So beyond the generic realisation of its value, organisations have to implement systems and internal procedures which reinforce this value to all employees who handle unstructured content and promote its safe-keeping and effective use.

According to the survey, two-thirds of European organisations say they have unstructured content adequately managed (23 percent) or are making significant inroads to do so (43 percent). But while nearly half (43 percent) of the organisations polled say they have the right amount of relevant information to hand when making decisions (fig 7), an almost equally large proportion either has too much unstructured information or what they need is buried in irrelevancy.

So despite the claim that organisations are getting to grips with unstructured content, drilling down more deeply from organisations’ attitudes to unstructured content to what they are doing about it, reveals there is still considerable ground to cover.

Email is also – quite naturally – identified by the respondents to IDG’s survey as the primary channel for sharing content across the enterprise (fig 9) and the source of information to which people are most likely to turn when making decisions (fig 10).
Among the sources to support decision-making, many of the high-scoring ones are informal and ad hoc – knowledgeable colleagues engaged in ‘water-cooler conversations’, instant messaging sessions; and information which is squirreled away on someone’s private hard disc – reflecting the real-word experience of many knowledge workers. Rather than systems to manage and deliver information, knowledge workers rely on developing their own maps for navigating the corporate information labyrinth.

**VALUING CONTENT**

One revealing measure of how much value an organisation places on an asset is the amount of senior management time devoted to it. So is the IT leader of a corporation – the CIO – a chief information officer or a chief infrastructure officer? According to the respondents, managing infrastructure is still what keeps more CIOs awake at night than managing information (fig 11).

While one might expect this to vary according to company size, where CIOs of large organisations have greater opportunities to delegate or outsource infrastructure management, it does not. Rather it varies by sector (fig 12). Retail, where supply chain management, customer data warehousing, competitor analysis and web strategy play a vital role in profitability, is the only sector where the CIO is focussed more on information than infrastructure. In the content-rich media sector infrastructure and information are equal.

However, this survey is a snapshot of only the current situation. The balance for CIOs is tipping strongly in favour of information over infrastructure, as revealed in a recent survey by Gartner and Forbes\(^4\).

Gartner and Forbes asked a global audience of senior executives about the responsibilities of the CIO now and what they predict they will be in five years. Exploiting information as a strategic asset was seen by 40 percent as the primary responsibility of the CIO now, but 57 percent predicted it will be in five years. This is a trend with considerable force.

**TRAINING**

Another measure of how much an organisation values unstructured content is the effort it makes to train employees to value information assets. Sixty percent of respondents claim that they train employees to safeguard and enhance information. However, when digging deeper to find out who is trained and in what, a less encouraging picture emerges.

Training still seems to be focussed on technology (fig 13), rather than information. If only one percent of 60 percent of respondents train their employees in record keeping, what does that say about the value their organisation puts on information? Information handling, data protection and company procedures all come well below new technology and application training, although the latter could feasibly contain some elements of information-handling policy.

\(^4\) Gartner/Forbes Executive Survey, Mark Raskino, Jorge Lopez, 20 February 2007
CONTENT VALUE: THE STRATEGIC APPROACH TO MANAGING AND EXPLOITING UNSTRUCTURED CONTENT

When we look at who is trained (fig 14) the 31 percent who replied ‘whoever needs it’ seems to indicate training is voluntary, another warning sign.

Increasingly, Microsoft SharePoint is used in a content management role, but enterprise-wide ECM is still required to support the front office, so it is important that these two can co-exist.

Increasingly, tools adopted for collaboration, such as Microsoft SharePoint, are used in a content management role. This can reduce the training burden on the organisation because it means users already have a familiar front-end to content management. However, collaboration tools still require a scalable ECM infrastructure as a backbone so that content can be accessed, tracked, audited and managed throughout the enterprise.

ECM SYSTEMS

Among those companies who say they already have or are in the process of managing their unstructured content, their investment is mostly embodied in content management systems, installed or planned on a departmental or enterprise scale.

Traditionally, organisations have managed content departmentally (fig 15). Point solutions to manage documents, records, intranets etc, have resulted in a plethora of systems managing some element of content for each part of the business.

Increasingly, content distinctions are blurring. For example, a regulatory record is not only the contract - records can also be emails, web pages etc; content used for the intranet may also be needed on multiple brand websites; policy documents need to be communicated internally but kept secure. Added to this is the risk of keeping information that is not needed (or worse, can lead to significant regulatory issues if discovered) and the result is complexity, inefficiency and high cost.

So, a departmental view plus the blurring of content types means that a strategic approach is the only viable approach.

Asked how many ECM systems the organisation has (somewhat oxymoronic given that ECM inherently is supposed to encompass the whole organisation), the average is 4.28.

The results point to a possible confusion between ECM and content management of any kind. Indeed, many of the ECM systems cited may in reality be conventional document- or records-management systems which are traditionally deployed on a departmental basis.

Of those organisations which say they have multiple ECM systems, 58 percent say they have a consolidation strategy to unify the systems after roll-out.
Let’s take a step back from the detail of the survey for a moment and speculate on what might be the fate of an organisation that chooses not to address the issue of unstructured content. After all, 15 percent of organisations confessed to not managing it (fig 1) and more than one in four on average (fig 17) has no plans to deploy an ECM system.

If an organisation does nothing about managing unstructured content, or only pays lip service to managing it by not taking a strategic view, then that organisation clearly risks being overrun by unstructured content. Employees will waste time sifting though unmanaged information looking for what they require to make a decision or solve a problem.

If the information impacts on a regulatory issue, then the danger to the firm is greater than just lost productivity and may run to legal action by shareholders or prosecution of directors by regulatory authorities.

But those are only the defensive arguments for managing unstructured content. If this content is left unmanaged or managed badly, the organisation will never derive value from it, and will never learn from the information contained in it.

Business decisions will be made without the correct supporting information; time and effort will be wasted re-doing tasks which have been done before; methodologies will be recreated; documents rewritten; mistakes repeated. Above all, successes will not be repeated for want of finding best-practice guidance bound up in ‘lost’ information.

Given this scenario, the danger is that CIOs will be tempted to implement content management systems department by department without thinking about how the organisation as a whole can benefit from each department’s content, or how they might access it.

But an organisation is more than the sum of its parts. If content management is organised on a departmental basis the organisation as a whole will never gain strategic benefit. The lessons learned about success and failure by one department will be known only to that department and will not be accessible to others.

As we have seen, in future, corporate performance will be derived from tacit exchanges – judgement calls – among knowledge workers which do not respond to classical efficiency improvements through process automation. Rather they require the augmentation of these exchanges with information. And this information is most frequently embodied in unstructured content.

Ergo, if unstructured content is left unmanaged, or not managed at an enterprise-wide level, corporate performance will not be properly managed.

This does not mean ECM should be implemented big-bang style. But the
CONCEPT VALUE: THE STRATEGIC APPROACH TO MANAGING AND EXPLOITING UNSTRUCTURED CONTENT

Strategic thinking needs to be done in advance of roll-out.

Creating, communicating and establishing best practice in ECM begins with top-level management initiative and continues with the involvement of every employee who handles information. The steps are broadly as follows:

- Establish what unstructured content the organisation has and how it is used by employees. Note the processes and technologies used by key departments (figs 18 – 21).

Pay special attention to email.

- Plan an enterprise-wide strategy for managing content so it can be stored, updated, and accessed by all employees.

- Pilot ECM

- Train all employees in information handling. Incentivise and reward them for best practice. Ensure management leads by example.

- Deploy ECM as an infrastructure in a phased roll-out.

CONCLUSION

In future, profit will be derived not from automation of processes but from augmentation of people’s knowledge with relevant information. Similarly, corporate performance management is no longer about efficiency but effectiveness.

Much of the information knowledge workers require to be effective and the necessary information for corporate performance management is bound up in unstructured content. Therefore, unstructured content is an asset and needs to be managed as such.

Implementing departmental content management solutions is only a defensive measure; an organisation will never derive the full competitive advantage that could be gained from managing unstructured content enterprise-wide.

Managing unstructured content requires procedures and ECM systems whereby it is valued, managed and freely accessible by all users.

Customers want companies to show intelligence in their interactions, to know, for example, their transactional histories and to present them with only relevant products and services. Citizens want their governments to show similar intelligence, record data once and not treat them as separate entities depending on what department they are dealing with.

To achieve this, companies and public-sector organisations must become learning enterprises: benefiting from unstructured content in decision making and operations, learning from experience of success and failure.

METHODOLOGY & DEMOGRAPHICS

IDG’s pan-European study was based on 527 telephone interviews with senior IT decision makers (75 per country) in Belgium, France, Germany, Netherlands, Spain, Switzerland and the UK. All respondents were responsible for decisions on the implementation of company-wide strategies and systems such as ECM, CRM or ERP. Each interview lasted 15–20 minutes and was conducted in native language. The universe of respondents were largest companies in each country with the lower employee limit based on number of companies in each country.