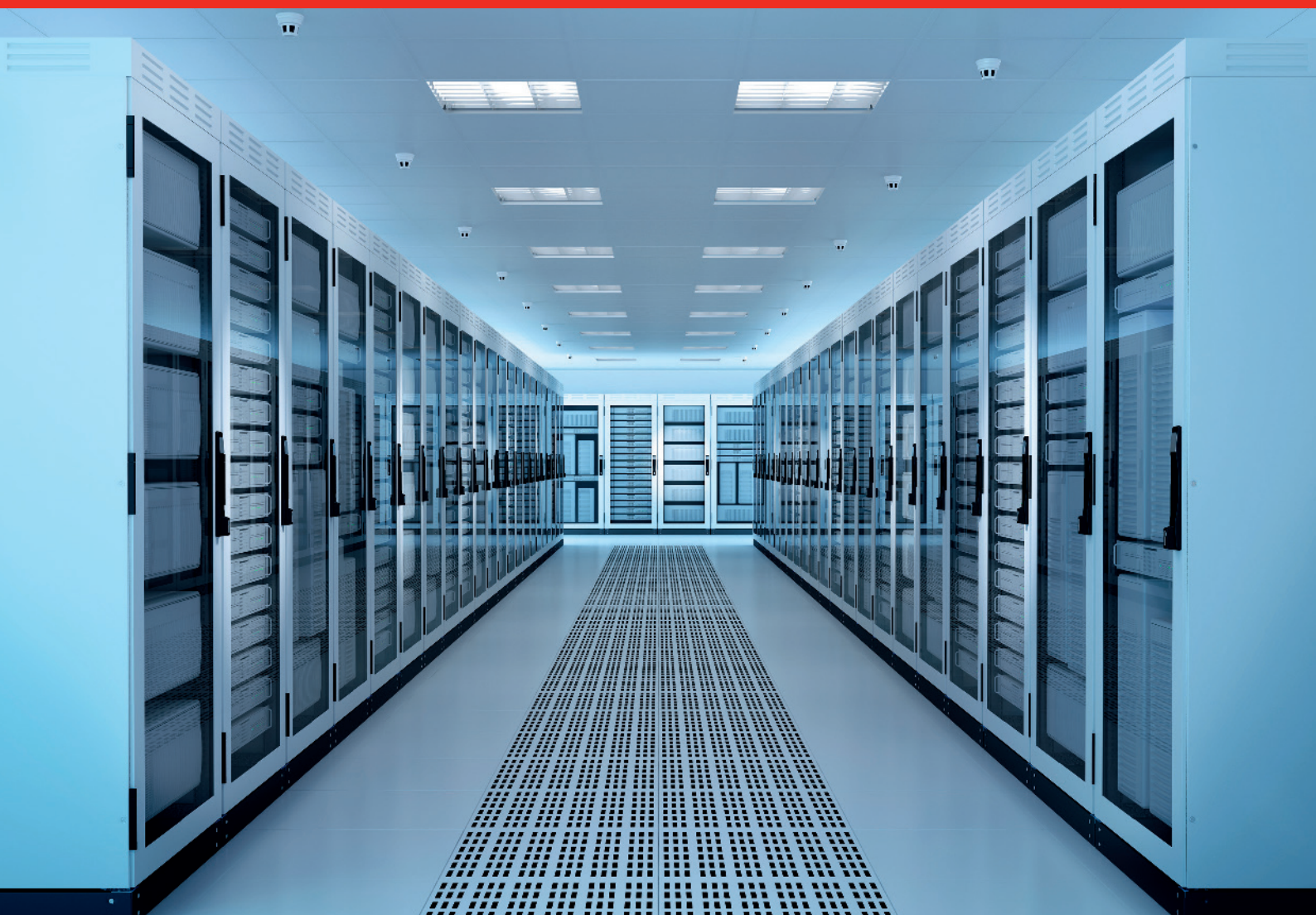


PAS 89:2012

Enterprise content management – Code of practice



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Foreword

Publishing information

This PAS was sponsored by The Content Group¹⁾. Its development was facilitated by BSI Standards Limited and published under licence from The British Standards Institution. It came into effect on 31 October 2012.

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¹⁾ www.thecontentgroup.co.uk

Use of this document

It has been assumed in the preparation of this PAS that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

As a code of practice, this PAS takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this PAS is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions in this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in italic type, and does not constitute a normative element.

Contractual and legal considerations

This PAS does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with this PAS does not of itself confer immunity from legal obligations.

0 Introduction

0.1 The need for enterprise content management

Organisations are becoming increasingly aware of the value of the information that they hold, and are recognising the value of being able to use this information effectively and efficiently. Enterprise content management (ECM), being a combination of technology and practice designed to manage information across an organisation and its extended community, is thus becoming an important part of the organisational IT infrastructure.

In the same way that enterprise resource planning (ERP) works to improve the operational efficiency and competitiveness of an organisation, ECM allows the organisation to gain control over the information that it uses to achieve organisational objectives. With the right ECM infrastructure in place, information (content) can be geared around practices and around how people interact with the practices, thus providing the right information at the right time as necessary to do the job well.

Over the last few years, ECM has developed from a department level, point-based, niche solution to an enterprise-wide infrastructure. In order to achieve the maximum benefit from ECM, organisations need to have a clear initiative for its implementation and operation.

The overriding organisational objectives to be borne in mind when developing an ECM initiative include the following.

- **Achieve operational efficiency**

Moving from the management of information being a passive, manual, error-prone practice to an active, automated, error-free practice delivers organisational value. Ready access to not only information, but the right and appropriate information can make even the largest organisation an agile one.

- **Gain competitive advantage**

Understanding the organisational information asset and being able to exploit it can deliver an advantage in the marketplace. It removes barriers to learning and brings meaning to information ultimately bringing tangible net worth to information.

- **Demonstrate compliance and reduce risk**

The effective management of information can be a significant part of the practice for enabling an organisation to demonstrate legal, regulatory and/or business compliance in whatever form it is required. ECM provides the means to support compliance in relation to the information that is held by the organisation as a whole. ECM can help to reduce risk of non-compliance which can incur significant penalties. It is not just the financial savings that implementing ECM can achieve that are important. The potential costs of not having good information management might be just as significant.

- **Support discovery**

In the event of litigation, regulatory or other investigations it can become necessary to find (or “discover”) evidence. Good management of information facilitates discovery; poor management impedes it, making discovery practices unreliable and more expensive than necessary. ECM can support the former and safeguard against the latter.

The overriding barriers to the effective implementation of ECM are:

- not understanding what ECM is and why it is important;
- not having an ECM initiative aligned with organisational objectives;
- not knowing how to go about this initiative and how to measure its effectiveness;
- underestimating the change management and investment required for ECM.

0.2 About this PAS

There are many existing British and International Standards which specify and/or recommend how effective document and records management can be achieved (see Bibliography).

This PAS has been created by consensus between experts with domain expertise across the ECM industry. This PAS seeks to encompass key aspects of ECM practices and technologies.

This PAS documents good practice in going about an ECM initiative and its implementation, coupled with an approach on how to measure effectiveness of the ECM implementation, to enable successful enterprise-wide deployment.

This PAS provides a definition and common understanding of ECM. It supports benchmarking and enables consistent, measurable ECM with increased accountability and transparency across all relevant information.

Using PAS 89 in its entirety can assist in helping an organisation to obtain the potential benefit from ECM, either as a new ECM initiative or as an improvement to an existing ECM implementation. Whilst it is certainly preferable that this PAS is followed in full, where there are critical time factors relating to an ECM project, which do not allow for its entire application, then this code of practice acts as a useful reference in any fast-track implementation.

1 Scope

This PAS details good practice for enterprise content management (ECM). It defines what ECM is and what to consider when embarking on an ECM initiative. It can be used to further an existing initiative or used to develop a new initiative.

It is applicable to all those involved in or considering ECM, particularly end user organisations. In particular it is intended for use by project managers, business stakeholder managers, IT managers, record managers and information managers in organisations who are engaged in seeking to establish good use of information organisation-wide.

It is not intended to be a technical specification, business case, project management methodology, information strategy or service delivery model. This PAS does not provide any particular alignment to specific industry sectors.

2 Terms, definitions and abbreviations

For the purposes of this PAS, the following terms and definitions apply.

2.1 Terms and definitions

2.1.1 enterprise content management (ECM)

framework of practices and technologies that work in an integrated fashion across the organisation to manage information

2.1.2 life cycle

stages information goes through from creation to disposition or destruction

2.1.3 metadata

set of data that describes and gives information about other data

2.1.4 practices

activities and supporting processes for ECM

2.1.5 system

collection of ECM technologies

2.1.6 taxonomy

managed set of terms

2.1.7 technologies

software products which support the application of ECM

2.2 Abbreviations

CAD – computer aided design

CMIS – content management interoperability services

ECM – enterprise content management

ECMS – enterprise content management system

EDI – electronic data interchange

HR – handprint recognition

ICR – intelligent character recognition

IT – information technology

JCR – java content repository

KPI – key performance indicator

OCR – optical character recognition

OMR – optical mark recognition

PDF – portable document format

RFI – request for information

ROI – return on investment

SQL – structured query language

XML – extensible markup language

3 Enterprise content management (ECM)

3.1 What is ECM?

ECM is a framework of practices and technologies that work in an integrated fashion across the organisation to manage information. Those responsible for ECM within the organisation should ensure that they have an understanding of what ECM is and what it is comprised of.

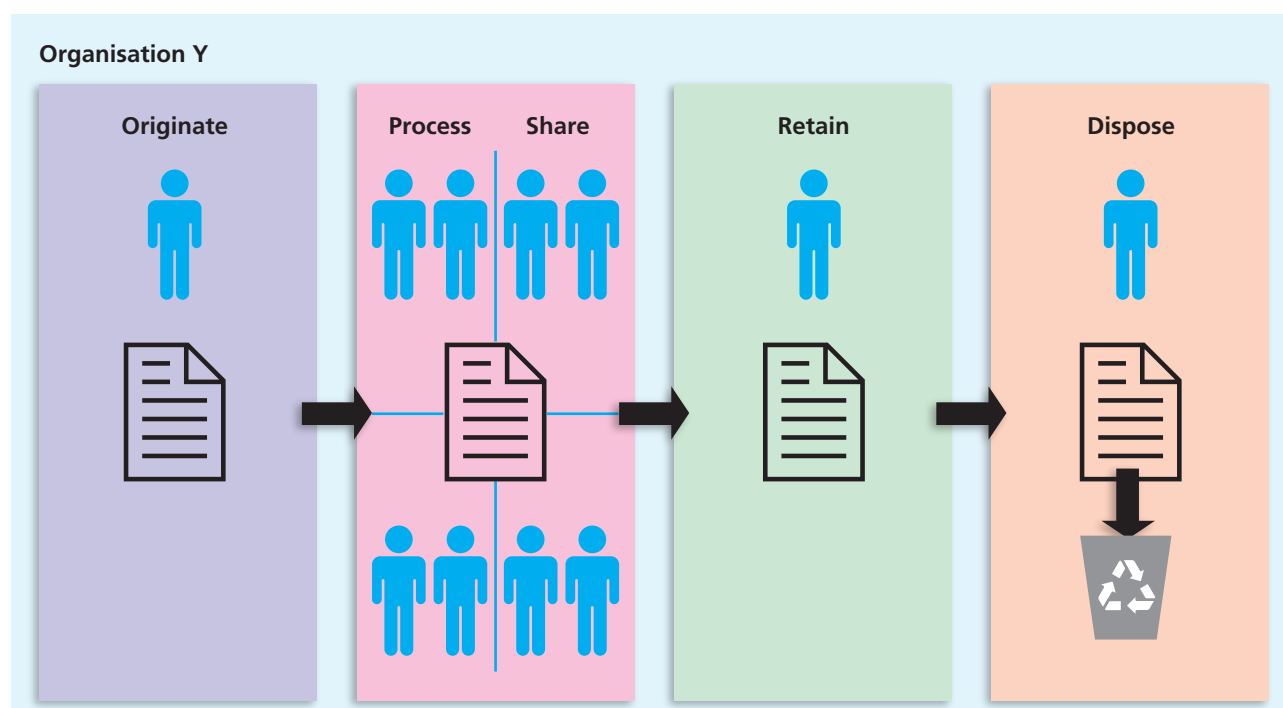
NOTE This clause further describes the makeup of ECM and what needs to be understood in regard to ECM when embarking on an ECM initiative.

3.2 Organisation-wide

ECM should be established organisation-wide for managing content throughout its life cycle. Figure 1 provides an example of the life cycle of content.

NOTE Whilst ECM might be established organisation-wide this does not rule out a phased approach being adopted in achieving this goal. In fact such a phased approach can assist in reducing the risk involved in establishing ECM.

Figure 1 – Example life cycle of content organisation-wide



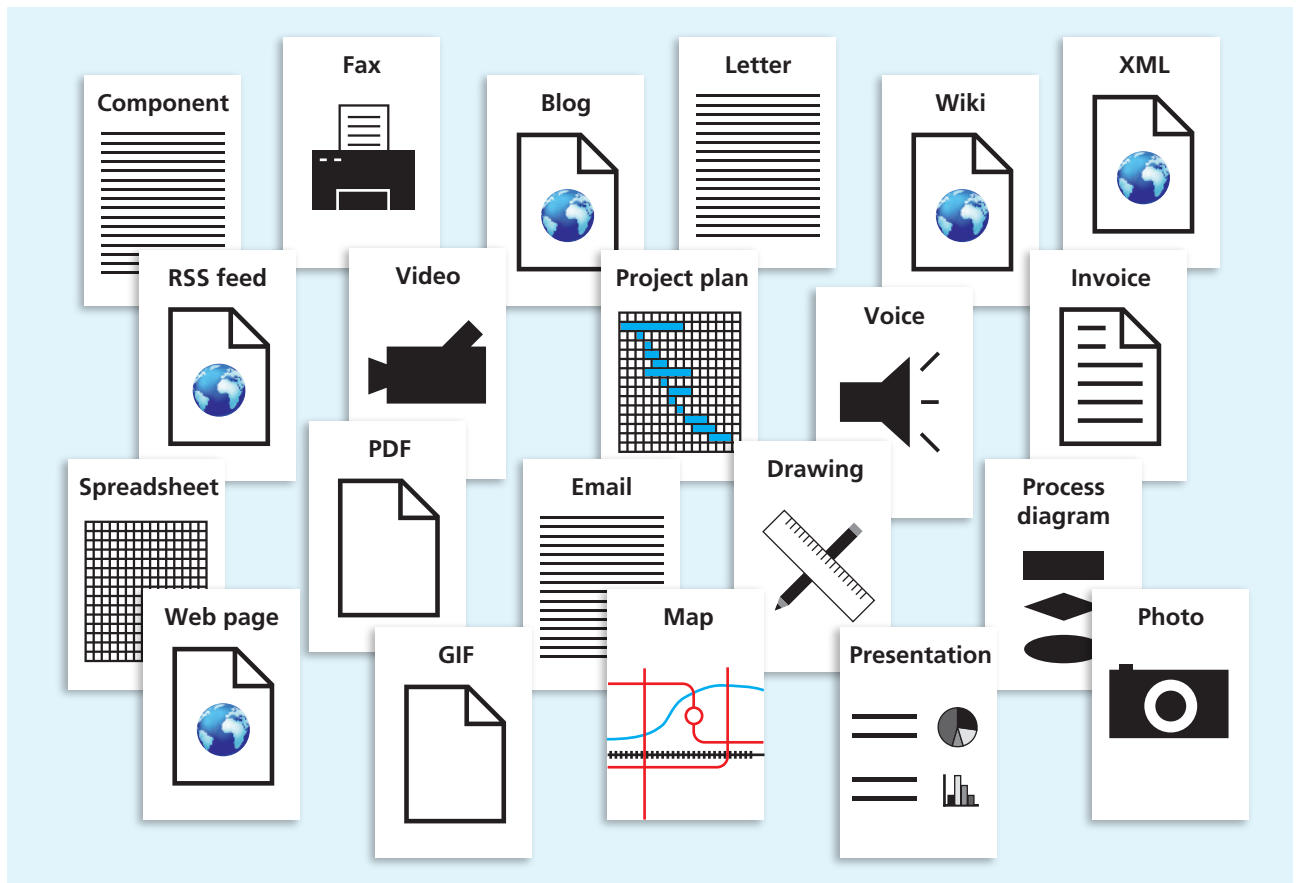
3.3 Content

The organisation should assess and document what information is applicable as content for the ECM.

NOTE 1 Any information where an organisation would derive benefit through its management is applicable to ECM.

NOTE 2 Figure 2 provides an example of information that is typically applicable to ECM.

Figure 2 – Information typically applicable to ECM

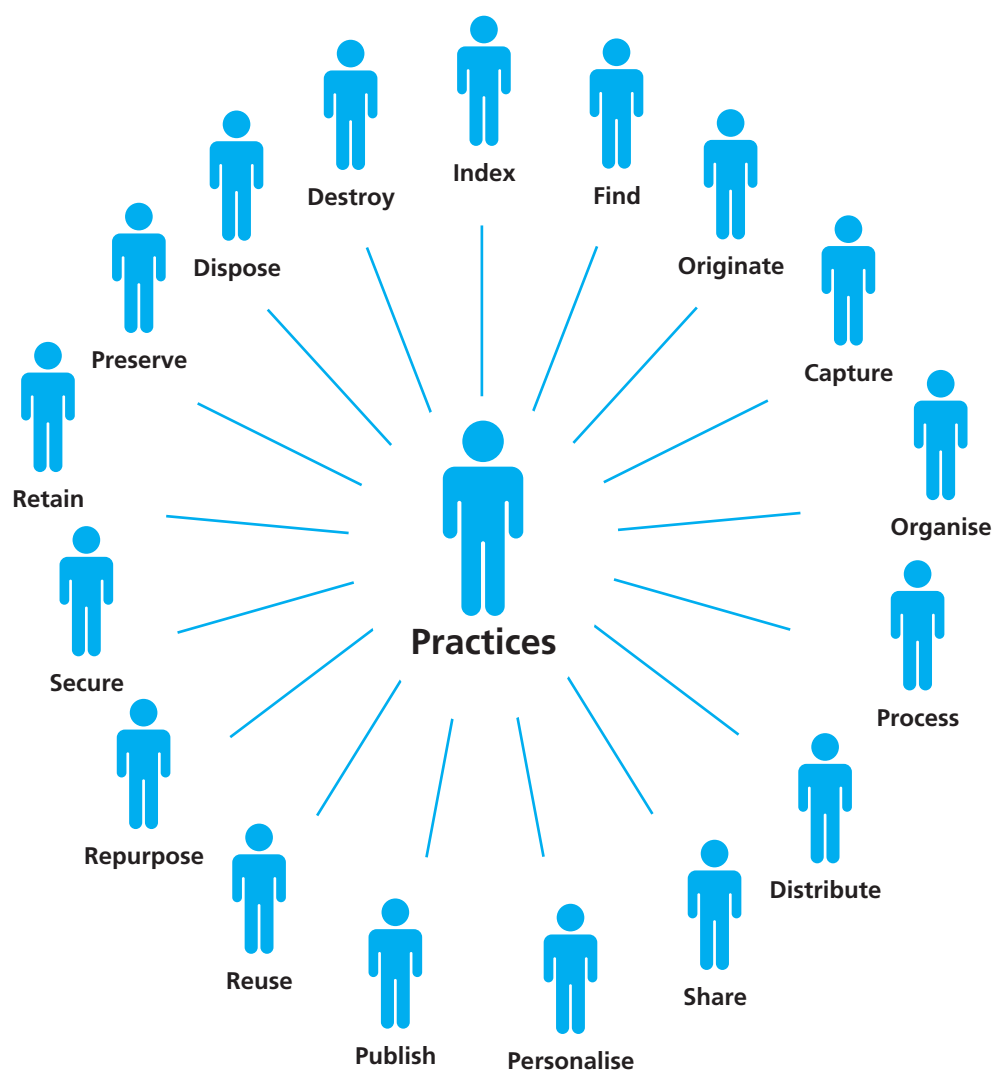


3.4 Application of practices

The organisation should assess and document which practices should be applied to content throughout its life cycle. Those responsible for ECM within the organisation should have an understanding of these practices and how they should be adopted.

NOTE Figure 3 provides an example of practices that can be used in ECM.

Figure 3 – ECM practices



The practices depicted in Figure 3 should be considered in the context of Table 1.

Table 1 – Recommendations in respect of practices identified in Figure 3

Practice	Purpose	Recommendations
Index	To apply metadata to content	• Requirements should be understood for each practice • Education should be sought for each practice • Technical expertise should be sought to advise on the best approach to the required practice areas • Any overlap with additional practices should be identified • The level of any functional requirement within any practice should be understood and aligned to relevant enabling technology • Policy documents should take account of requirements in each relevant practice area
Find	To search and locate content based on metadata and/or textual content	
Originate	To create new content	
Capture	To save content or a copy (or scan) of some content so it can be managed	
Organise	To provide order and apply controls to content	
Process	To take content through a workflow	
Distribute	To make available and/or “push” items of content to both human and computer users	
Share	To make content available for use and review	
Personalise	To provide content tailored to the user	
Publish	To take content and to move it (or a copy of it) to an accessible location (e.g. the web) and format whilst maintaining its structure	
Reuse	To use the whole or parts of existing content for other purposes	
Repurpose	To change the format or publishing mechanism of existing content for alternate use	
Secure	To enable controlled access to content and its protection	
Retain	To keep content for a stipulated period of time	
Preserve	To keep content in an accessible format for a stipulated period of time	
Dispose	To remove content whilst maintaining its history	
Destroy	To erase all traces of content, including copies and indexes	
NOTE Collaboration consists of a number of practices.		

3.5 Why consider ECM?

ECM should be considered by any organisation wishing to achieve organisational objectives that have a dependency on content.

3.6 Organisational objectives

3.6.1 General

Organisational objectives should be identified and provide the driver for ECM. The organisational objectives should be categorised in one, if not all, of the broad categories detailed in 3.6.2 to 3.6.5.

NOTE Whilst the objectives might, one way or another, be implicit with ECM it is not necessarily with a view to creating the “paperless office”. Paper is best suited as a transient means of capturing and communicating information in an easily accessible form and as long as it is approached in this way it can be integrated into ECM and be of benefit. This correct use of paper can also help with user acceptance and change management.

3.6.2 Operational efficiency

Consideration should be given as to where the greatest efficiency gains could be achieved through establishing ECM.

Inefficiency could come in many forms such as duplication of effort, people-intensive processes, poor use of time looking for content, avoidable errors, problems that have arisen and work that has to be done again due to poor content use.

Analysis should be undertaken and metrics developed to help understand the cost of this inefficiency and enable benefits measurement.

3.6.3 Competitive advantage

Consideration should be given as to how the organisation could be more competitive through establishing ECM.

This could be realised by dealing with customer enquiries more quickly by having access to the right content, or accelerated product development resulting in a faster time to market ahead of the competition and with improved quality control.

Analysis should be undertaken in line with the organisational go-to-market strategy to understand where the biggest competitive wins might be and enable benefits measurement.

3.6.4 Demonstration of compliance and risk reduction

Consideration should be given as to how the organisation could demonstrate compliance and reduce risk through establishing ECM. Any compliance initiative should take account of ECM and vice versa. Compliance itself can come in many forms such as adherence to quality programmes or financial or

industry regulation, or compliance with environmental directives.

Analysis should be done to understand which compliance factors are of importance and how they can be complied with most effectively.

NOTE Organisations need to be mindful of the lure of a compliance-only route. Whilst ECM can deliver a wide range of benefits, a compliance centric ECM implementation is unlikely in itself to achieve the operational efficiency or competitive advantage that ECM can deliver. Fundamentally, compliance is not the end goal. The goal is to address compliance requirements whilst working toward organisational objectives that may also improve operational efficiency and gain competitive advantage.

3.6.5 Support for legal discovery

The organisation should consider how legal discovery could be supported through ECM. ECM should support good practice for legal discovery.

In the event of litigation, if it becomes necessary to find (or “discover”) evidence, poor management of content could impede such discovery, making it unreliable and more expensive than it need be.

Analysis should be done to establish what legal discovery might be required and what ECM can support.

3.7 When and where to consider ECM?

ECM should be considered at any time and place that the management of content is implicit in meeting organisational objectives that are likely to deliver benefit to the organisation.

NOTE Often there may be a number of projects identified which have a common thread in that they are centred around the management of content, e.g. case management, project management, customer service management. At this stage the organisation may consider if these are best served via an ECM initiative.

3.8 Who should consider ECM?

ECM is applicable to all organisations and should be considered within the context of any relevant organisational objectives.

4 ECM planning

4.1 General

An ECM initiative should be appropriately planned and its implication to the organisation as a whole considered. ECM can be a complex area and so ECM expertise should be sought to aid planning, either within or external to the organisation, via education and consultancy.

When setting about an ECM initiative, organisations should prioritise those areas in which there is potential for “quick wins” to demonstrate the value of ECM whilst ensuring that the organisational objectives and envisaged outcomes of the ECM initiative remain. The approach should be business led with the common thread being content. Whilst benefiting the organisation it can in turn provide benefits to its customers.

NOTE 1 *Organisations need not be deterred by not having everything in place to implement ECM prior to commencement. Provided all practices and their implication have been considered (i.e. relevant questions have been identified and answered or at least considered), then the implementation can proceed in a manner that enables future alignment to other practices.*

NOTE 2 *An ECM initiative may coexist with the organisation's existing overall information initiative which addresses not only content but all information.*

NOTE 3 *Isolated content-related projects introduced independently of each other are capable of providing immediate business benefits and reducing costs. However, they might not establish ECM, and over time can be a conduit for promoting a siloed approach which could impede the benefits that ECM has to offer.*

4.2 Organisational

4.2.1 ECM initiative map

An ECM initiative map should be established that enables the organisation to identify the areas of particular importance that need to be considered when embarking on an ECM initiative.

NOTE 1 *Figure 4 identifies areas of particular importance with any ECM initiative. This is shown in a simplified linear process although in practice this is likely to be cyclical.*

NOTE 2 *Although appropriate to a smaller organisation or a departmental implementation, the sequential process indicated in Figure 4 might well be impractical for a large or distributed organisation. In this case an agile or iterative methodology might be more suitable.*

NOTE 3 *When creating a vision or gathering requirements, it is important to have some idea of the “art of the possible”. Thus, familiarity with the technological options and practical solutions is needed quite early on in the process. In terms of development processes, there is often a need to repeat the cycle of definition and implementation in order to develop capability in an evolutionary manner. One of the risks to avoid is to create a set of requirements that involve excessive customisations of selected technology. There is a need to have a balance in order to optimise the business value while reducing complexity.*

4.2.2 Sponsorship

4.2.2.1 General

An ECM initiative should be sponsored by the organisation's executive and supported by stakeholder management.

NOTE 1 *This helps to ensure that full buy-in is achieved from all management groups which in turn helps in meeting one of the biggest organisational challenges brought about by ECM: cultural change.*

NOTE 2 *A successful ECM initiative requires input and sponsorship from both business and IT.*

4.2.2.2 Executive

An overall executive sponsor should be assigned to take responsibility for the ECM initiative preferably at board level, given its strategic nature. This sponsor should be responsible for ensuring that the ECM initiative aligns with the organisational objectives.

NOTE 1 *See objective plan (4.3.6).*

NOTE 2 *ECM is organisation-wide and therefore by its nature is strategic so it is essential that, relative to the size of any organisation, comprehensive levels of resource and investment are provided.*

4.2.2.3 Business level

Stakeholder management who have been involved in the objective setting should in turn be responsible for defining their functional requirements in line with those objectives.

4.2.2.4 User community

Buy-in should be gained at the management level and also from within the user community, creating lead users. Whether individuals or teams of people, lead users should be the conduits to gaining broad acceptance in their respective user community. These lead users should become the role models for other users within their respective community.

Figure 4 – ECM initiative map

