

## Architecting an Enterprise Content Management Strategy: A Four-Pillar Approach

With a structured enterprise-content management (ECM) strategy, organizations can develop a well-defined blueprint and cohesive solutions for effectively managing documents and business processes across the enterprise.

### Executive Summary

Regardless of their scale, many organizations are only now recognizing the need to better manage their content ecosystems. The steady growth of enterprise content located in various locations and media makes it more challenging than ever to deliver the right information to the right people, when and where they need it.

In this paper, we will highlight the four major elements, or pillars - people, process, content and technology - that make up an effective ECM strategy.

Focusing on only one element will not yield an effective content-management framework. A cohesive, four-pillared approach is essential for organizations looking to create an all-inclusive, enterprise-wide ECM framework with well-defined governance, processes and systems. Also, unlike typical realignment initiatives, ECM strategies should not follow a rigid operational premise. Due to the ever-changing nature of organizational content, ECM initiatives require more exploratory, "abstract" tactics from the outset.

In the following pages, we will present a professional perspective on the intricacies of architecting a content management strategy within the context of the four ECM pillars. The paper will then lay out an approach for achieving timely and meaningful deployment of such an initiative.

### Enterprise Content Management: A Primer

In our many customer engagements, we have observed the exponential growth of enterprise content - the majority of which is unstructured data (i.e., documents, Web pages, XML components, audio and video) that is increasing at an exponential rate. Organizations are struggling to effectively manage this torrent of data - the result of an increasingly complex regulatory landscape and the need to discover information stored in electronic format (in the event of regulatory compliance issues).

To address these challenges and make their mark in today's increasingly digital, knowledge-based economy, companies must be able to capture,

distribute, store and systematically manage unstructured organizational content end-to-end (see Figure 1).

Organizations that focus more on the technological implementation of ECM can lose sight of other important facets (such as people, processes and content). This can result in a short-sighted ECM strategy, which in turn can lead to sub-optimal content management.

In essence, ECM supports organizational functions and underlying lines of business (LOBs) by allowing an enterprise to:

- Capture documents, forms and/or information for processing transactions, fulfilling customer service requests, handling exceptions and inserting into workflow systems.
- Uniformly classify and tag content for better search, reuse, entitlement control and life cycle management.
- Support content-intensive processes by delivering the right information to the right people, store or system at the right time to execute the right activity.
- Enable collaboration and help drive efficiency across business processes.

- Support federated content management through “ingesting” content across enterprises and diverse repositories.
- Safeguard the business by managing risk associated with the increasingly complex regulatory environment.

## Defining the ECM Pillars

An ECM implementation should be part of a structured, organized effort, with the goal being to devise an enterprise-wide content management strategy that focuses on the four key facets, or “pillars” of ECM. Figure 2 (next page) illustrates how these pillars and their associated drivers support such an undertaking.

- **People** denotes the human element behind any technological implementation. This pillar comprises day-to-day knowledge workers, IT support staff, executive leadership, technology partners and other human stakeholders.
- **Process** refers to the organizational steps, protocols and tactical procedures needed to support business operations, facilitated by content management systems.
- **Content** implies all unstructured content and knowledge spread across organizational storage systems. This pillar is diverse -

## Systematically Managing Enterprise Content



Figure 1

## Pillars and Drivers of an ECM Strategy

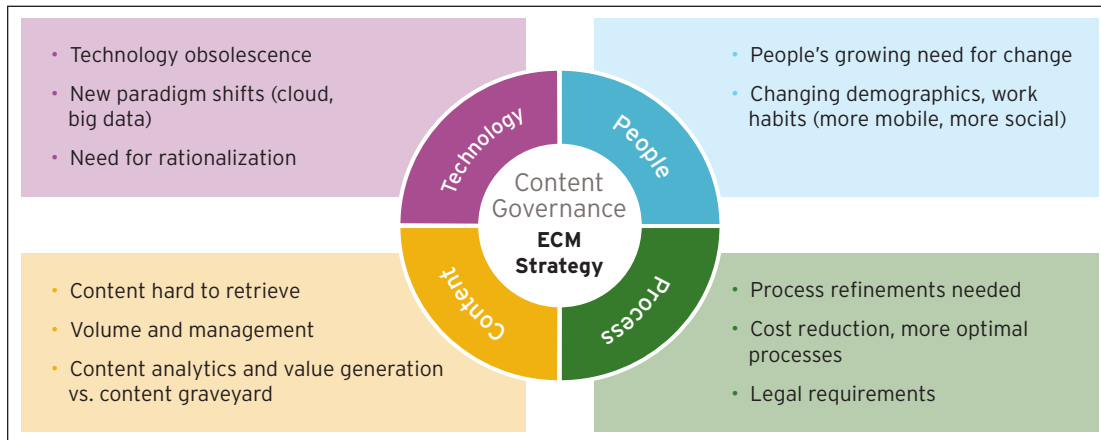


Figure 2

incorporating e-mail, video, documents (physical and electronic) and other types of content. Due to the increasing volumes of unstructured and ungoverned content, governance and a standard organizational framework are requisite.

- **Technology** refers to the physical and electronic IT infrastructures needed to facilitate content lifecycle management.

### ECM Gaps and Strategic Drivers Across Pillars

Over time, each ECM pillar will be affected by organizational gaps, which should trigger associated actions for maintaining a cohesive, enterprise-wide content strategy (see Figure 3).

Our experience suggests that a compartmentalized focus across multiple departments and processes - influenced by "reactionary" ad-hoc organizational initiatives - is responsible for

### ECM Gaps and Strategy Drivers

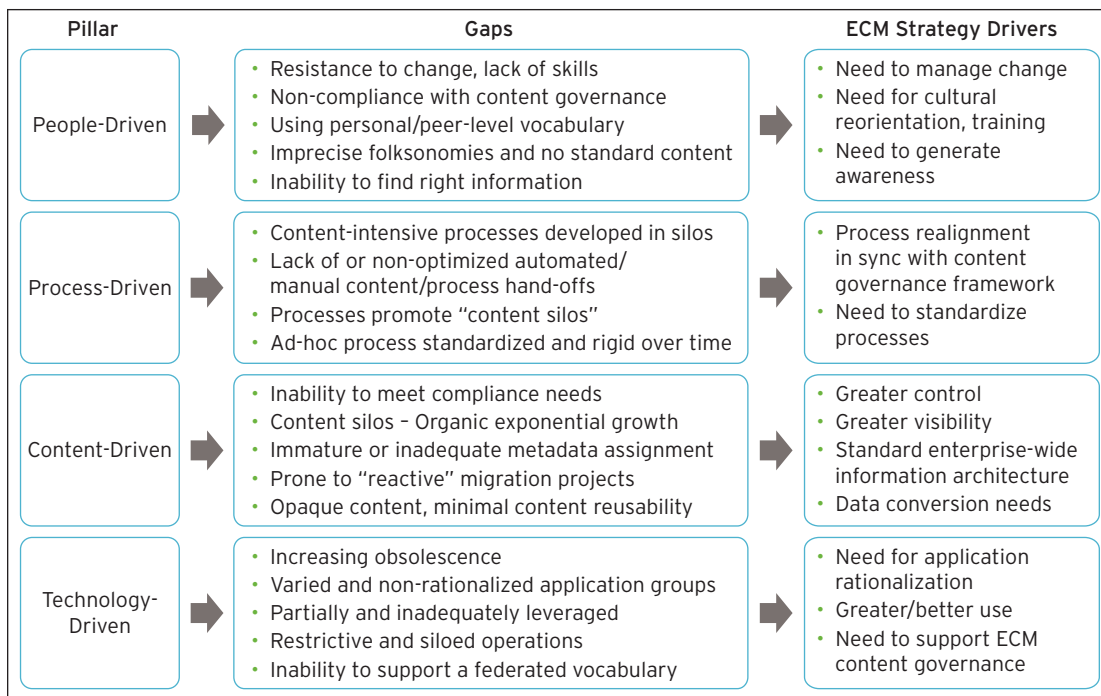


Figure 3

the most “visible” ECM shortcomings, while the lack of an enterprise-wide “vocabulary” and the absence of a content-governance framework are behind the majority of the gaps listed in Figure 3.

## Defining an ECM Strategy

Each ECM pillar requires a dedicated, synchronized approach focused on internal activities such as training (people), content governance (process), information architecture (content) and application rationalization (technology that eliminates content management gaps from relevant dimensions).

A mature ECM strategy incorporates all four pillars through a coordinated framework that recognizes and responds to specific ECM strategy drivers, as depicted in Figure 4.

The complexity of developing an ECM strategy rears its head if each element of an ECM strategy is viewed as a separate project. While organizations need “dedicated” projects within each pillar, ECM initiatives cannot exist in isolation. A practical, well considered ECM roadmap should focus on the inter-connections between various pillars. For example, application rationalization cannot be implemented without considering content migration needs.

## ECM Strategy Development

An effective ECM strategy should be a multi-pronged consulting exercise operating on two separate tracks - one focused on functional gaps and practices, the other on technical requirements. (See Figure 5, next page).

- **The functional track** first assesses gaps in the organization's current content-management practices, followed by advisory services (e.g., gap analysis, roadmap, content governance plan).
- **The technical track** complements the functional track by gauging the viability of current/future content-management tools and technologies.

Following this exercise, the consulting team presents a composite future-state ECM transition roadmap, along with recommendations for prioritizing ECM opportunity initiatives.

## Current and Future State Analysis

An ECM strategy is not a one-dimensional exercise that focuses on any one ECM pillar; on the contrary, a successful ECM blueprint incorporates a multi-dimensional analysis that takes into account current and future-state assessments,

## Elements of an ECM Strategy

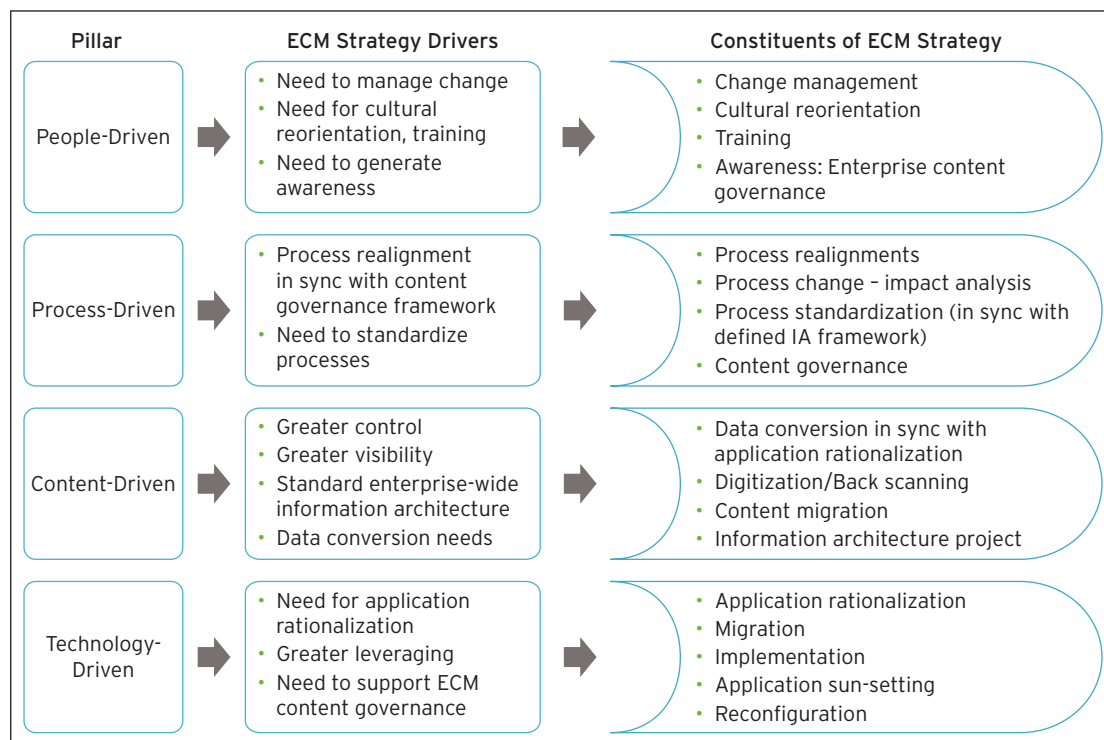


Figure 4

and encompasses people, process, content and technology (as depicted in Figure 6, see page 6).

## Key ECM Strategy Considerations

Like any strategic initiative, a successful ECM strategy requires relevant organizational interventions, user orientation and education, and close attention to controlling the quality of new processes. When developing an ECM roadmap, we recommend the following steps to help ensure effective governance:

- **Relevant prioritization** addresses processes, LOBs, application groups, etc. A viable ECM strategy should follow a phased approach, which helps reduce risk and focuses on small wins rather than a “big bang.”
- **Adequate internalization** aligns project objectives, SME availability and workstream coordination.
- **Transparent strategy implementation:** This helps to negate any ambiguity about organizational direction.

- **Right product fit:** The focus here should be on enterprise needs. For example, the best product in the market may not be the best product for the organization.

- **Alignment with international/industry/organizational activities.** This could include W3C norms, DCMI standards, etc.

- **Relevant and scalable ECM future-state reference architecture.** The focus here should be on the ability of the model to scale up to additional divisions and departments.

- **Development of a limited but empowered group of business stakeholders or development/execution team.** Smaller groups work more efficiently.

- **Synergy among IT and business stakeholders:** Critical, but not always a given.

Like any strategic initiative, a successful ECM strategy requires relevant organizational interventions, user orientation and education, and close attention to controlling the quality of new processes.

## Developing an ECM Strategy

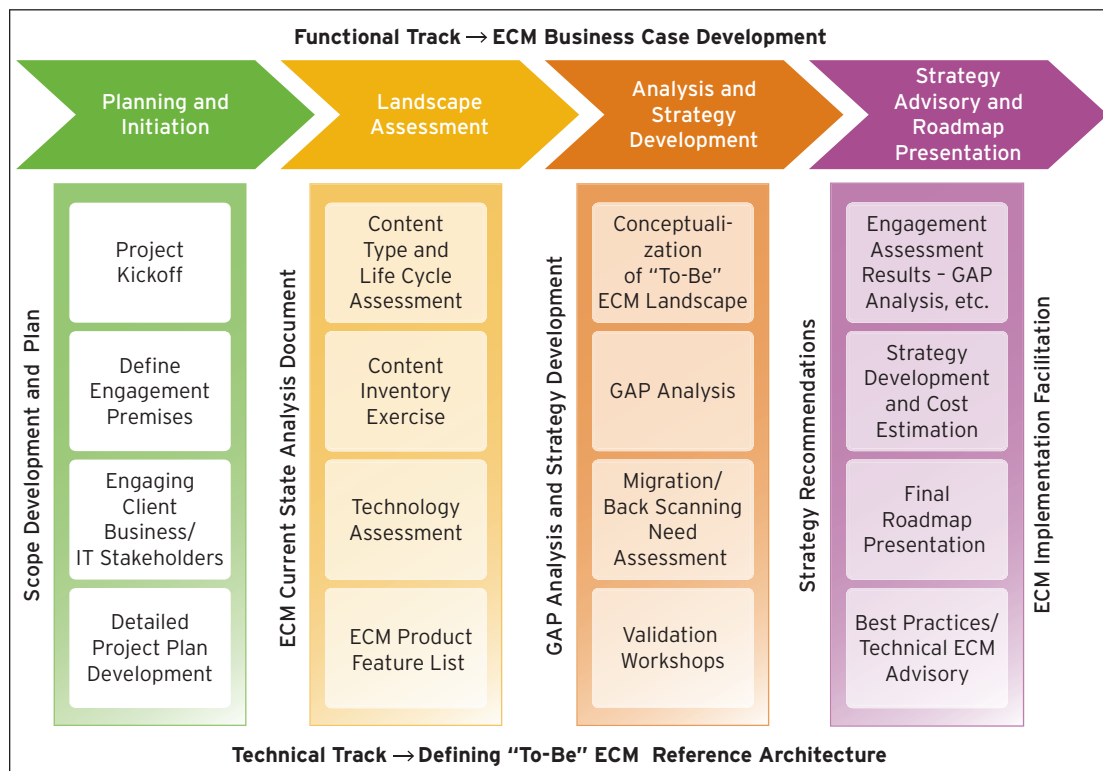


Figure 5



## ECM Current and Future State Analysis Approach

|                        | People Assessment  | Process Assessment   | Content Assessment   | Technology Assessment  |
|------------------------|--|--|--|--|
| Current State Analysis | <ul style="list-style-type: none"> <li>Awareness sessions</li> <li>Vocabulary questionnaire</li> <li>Search effectiveness survey</li> <li>ECM need assessment workshops</li> </ul> | <ul style="list-style-type: none"> <li>High-level process mapping and current state assessment</li> <li>Content-intensive process analysis</li> <li>Content/process hand-off analysis</li> <li>Process gap analysis</li> </ul> | <ul style="list-style-type: none"> <li>Compliance need assessment</li> <li>Content inventory survey</li> <li>Content extraction: <i>Full/Sample (Automated)</i></li> <li>Current state metadata mapping</li> <li>Taxonomy facet mapping</li> </ul>   | <ul style="list-style-type: none"> <li>Technical due diligence</li> <li>Application group survey</li> <li>Application walkthrough</li> <li>Integration need assessment</li> <li>Solution feature list extraction</li> <li>Migration need assessment</li> </ul> |
| Future State Analysis  | <ul style="list-style-type: none"> <li>Change management planning sessions</li> <li>Training need assessment</li> <li>Awareness sessions: Enterprise Content Governance</li> </ul> | <ul style="list-style-type: none"> <li>"To-Be" process maps (high-level)</li> <li>Process realignment and standardization</li> <li>Process change - impact analysis</li> <li>Governance processes</li> </ul>                   | <ul style="list-style-type: none"> <li>Data conversion analysis</li> <li>Digitization/Back scanning requirement</li> <li>Content migration requirement elaboration</li> <li>Taxonomy development</li> <li>Vocabulary standardization with ontology, semantic enrichment with DCMI</li> </ul> | <ul style="list-style-type: none"> <li>Application rationalization analysis</li> <li>Solution envisioning workshops</li> <li>Deployment and sun-setting advisory</li> <li>ECM reference architecture</li> <li>Opportunity prioritization</li> </ul>            |

Figure 6

### Looking Ahead

An all-inclusive ECM strategy is vital for organizations looking to mitigate business and legal risks, reduce costs, and attain and sustain a competitive advantage.

When developing an ECM strategy, decision makers should take a prioritized, step-by-step approach to help ensure a holistic, tightly integrated ECM initiative:

- Assess the content environment and ECM needs.
- Scan for application rationalization opportunities.

- Conduct an information architecture audit.
- Evaluate available ECM products to gauge their adequacy and how they fit with business needs.
- Perform a compliance gap analysis.

A sound ECM strategy facilitates a structured transition to an optimal ECM environment supported by the four pillars of ECM - people, process, content and technology. Furthermore, besides enabling greater content control and visibility, an effective ECM environment can directly translate into hard and soft-dollar benefits.

## Glossary

CCM: Customer Communications Management

DCMI: Dublin Core Metadata Initiative

ECM: Enterprise Content Management

LOB: Line of business (s)

## About Cognizant's ECM Group

Cognizant's ECM Practice is a "single point" practice with dedicated service lines to drive growth in various ECM/CCM product segments, including IBM FileNet, OpenText, EMC Documentum, Oracle WCC, HP Extream, EMC xPressions and Oracle Documaker.

With a large pool of qualified associates, our ECM practice provides large companies with enterprise content management solutions and strategic advisory services across consulting domains such as ECM roadmap development, information architecture definition, ECM product evaluation, content management technology due diligence and ECM solution envisioning. We have successfully executed large enterprise content-management implementation programs for our customers worldwide.

Cognizant's partnerships with leading ECM solution providers facilitate exclusive access to knowledge bases, technology consulting, product revisions, 24x7 support, and various competence development and training programs.

For more information on how to drive your business results with Cognizant, contact us at [ECMBD@cognizant.com](mailto:ECMBD@cognizant.com).

## About the Author

*Abhishek Kumar is a Senior Manager within Cognizant's Enterprise Content Management Practice. An IBM- certified senior ECM strategist and information architect, he has functional specialization across all ECM sub-domains, including document management, imaging/capture, records management, customer communications management, business process management, knowledge management and information architecture. He has worked with major firms in the U.S., the UK, Canada and Malaysia in document and process management consulting. His experience encompasses ECM platform assessment, product evaluation, gap analysis and roadmap development for some of the largest banking, brokerage and insurance companies in the world. He can be reached at [Abhishek.Kumar@cognizant.com](mailto:Abhishek.Kumar@cognizant.com).*

---

## About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 75 development and delivery centers worldwide and approximately 187,400 employees as of June 30, 2014, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world.

Visit us online at [www.cognizant.com](http://www.cognizant.com) or follow us on Twitter: Cognizant.



**Cognizant**

### World Headquarters

500 Frank W. Burr Blvd.  
Teaneck, NJ 07666 USA  
Phone: +1 201 801 0233  
Fax: +1 201 801 0243  
Toll Free: +1 888 937 3277  
Email: [inquiry@cognizant.com](mailto:inquiry@cognizant.com)

### European Headquarters

1 Kingdom Street  
Paddington Central  
London W2 6BD  
Phone: +44 (0) 207 297 7600  
Fax: +44 (0) 207 121 0102  
Email: [infouk@cognizant.com](mailto:infouk@cognizant.com)

### India Operations Headquarters

#5/535, Old Mahabalipuram Road  
Okkiyam Pettai, Thoraipakkam  
Chennai, 600 096 India  
Phone: +91 (0) 44 4209 6000  
Fax: +91 (0) 44 4209 6060  
Email: [inquiryindia@cognizant.com](mailto:inquiryindia@cognizant.com)