



An ECM Journey



Over the last few years, Enterprise Content Management (ECM) has evolved multifold. This paper describes the past, current and future state of ECM, and talks about the focus shift in ECM implementation over the years. As in any other IT sector, ECM vendors have started offering better and enhanced capabilities through their products. Organizations have larger expectations from ECM projects in terms of better business benefits and support to achieve greater process efficiency. There is a change in the perception of an ECM project from being a mere technology implementation to one that satisfies specific business needs.



Past ECM Focus

Historically, the key focus of ECM projects was to provide organizations with a content storage repository. It provided secured access and better management of all types of documents and content. Even product vendors focused on ensuring content storage and accessibility in a secure manner. Through imaging systems, paper documents created as a part of different business processes were scanned into the ECM system for future reference. The system also provided basic features such as document routing, approval and publishing via workflow. For faster retrieval of information, advanced search functionality was made available. Implementation of ECM projects changed the method in which information was managed and handled in organizations. It helped in removing silos of information and in implementation of enterprise wide strategies.

Current ECM focus

The last few years have witnessed a more organized approach towards ECM implementation. ECM manages different kinds of unstructured content, which have their own specific needs. Specific focus areas have been developed such as:

- **Document Management** – It relates to the management of standard format documents. ECM handles the complete lifecycle for the document from creation, storage and management to final disposal or archival.
- **Records Management** – It relates to management of documents classified as 'records' typically as part of a legal or regulatory requirement. These documents are categorized and need specific security permissions.
- **Digital Asset Management (DAM)** – With the advent of media technologies, large numbers of media files are created in organizations. DAM provides better management of these files by providing functionalities such as thumbnail views and renditions.
- **Web Content Management** – It relates to the management of content being published in the organization's intranet and internet sites.

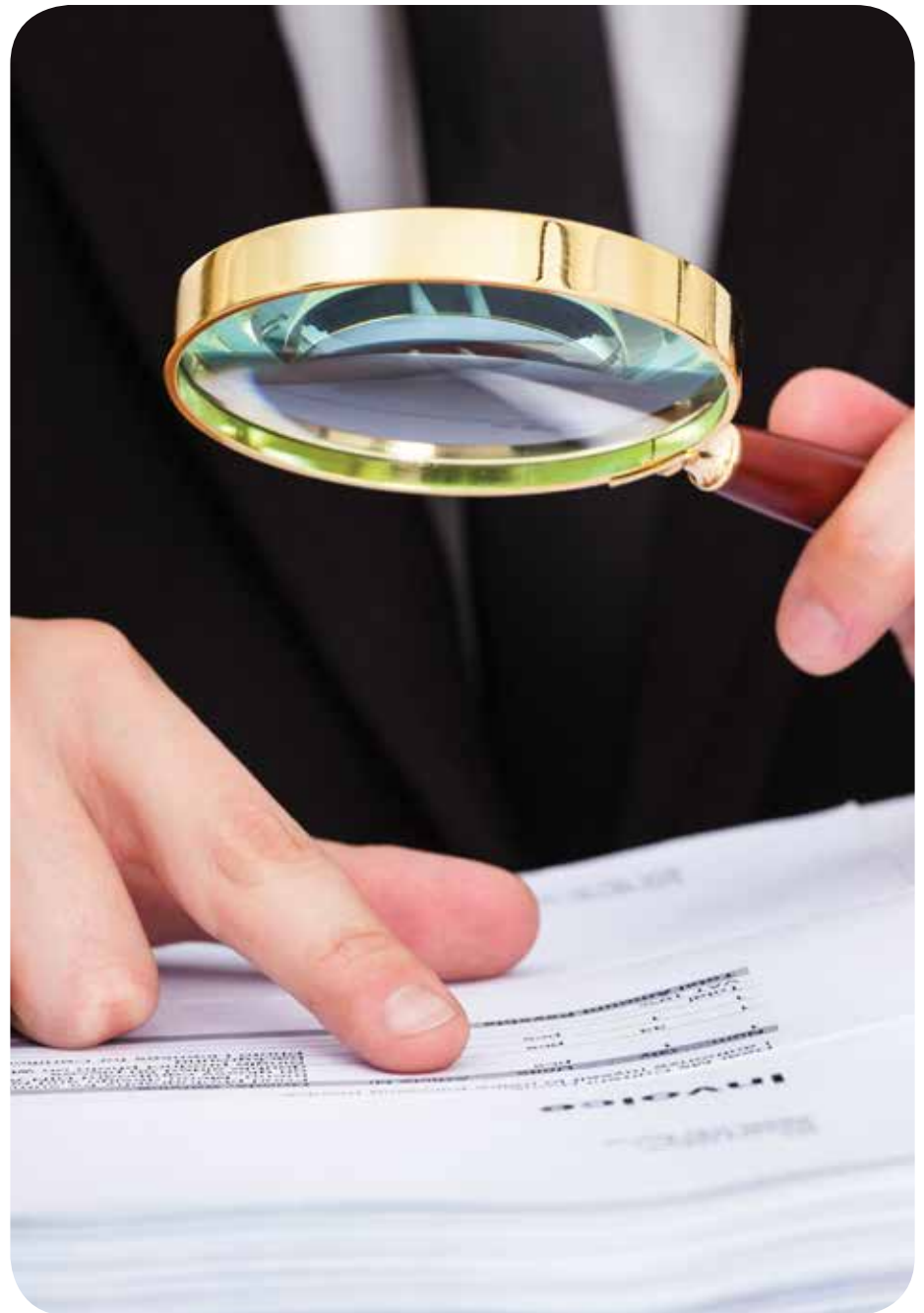
All the leading ECM product vendors such as OpenText, EMC and Oracle have specific components which handle the requirements mentioned above. Organizations also have understood that there is no 'one size fits all' kind of solution. Hence many ECM solutions are a mix of technologies from different vendors / suppliers.

Organizations define stringent Governance rules to manage different kinds of content in an organized way. For making any changes to an ECM application, the probable impact and benefits are analyzed. The focus is on defining the best policies and procedures for management of content.

ECM systems are no longer considered as independent systems that store specific content for organizations. They are well integrated with other systems such as ERP and CRM, and have well defined interfaces designed to support proper information exchange between these systems.

Organizations have started setting up ECM systems as the single source of truth. Organizations are integrating and merging multiple systems into a single system to attain better efficiency.

ECM systems are helping organizations meet specific compliance needs based on the industry domain and not solely a result of requirements mandated by public authorities. They are also helping organizations in defining clear ownership of content, detailed audit and monitoring. They help in litigation readiness by reducing the risks associated with the volume, classification and legal hold of electronically stored information. It balances the need for disposition with the requirement and risks associated to the legal hold of information.



Future State ECM

Going forward, the focus on ECM will continue to shift from that of a technology implementation to being a complete business solution. ECM can help organizations by providing solutions that empower business users, support multi-channel output, deliver personalized content, enable cost effective deployment, and help achieve faster collaboration and better return on investment (ROI).

The new focus areas for ECM will be:



Multi-Channel Delivery

The impetus on ECM solutions will be to integrate information from various systems and render them on multiple devices. ECM product vendors will continue to focus on providing content through various mobile devices. It will provide various benefits such as improved productivity, process efficiency (through approval workflows), improved compliance and the use of familiar interfaces.

Various ECM vendors have specific components which allow rendering of content on mobile devices. Mobility solutions utilize responsive framework to render content in different layouts/formats based on these devices.

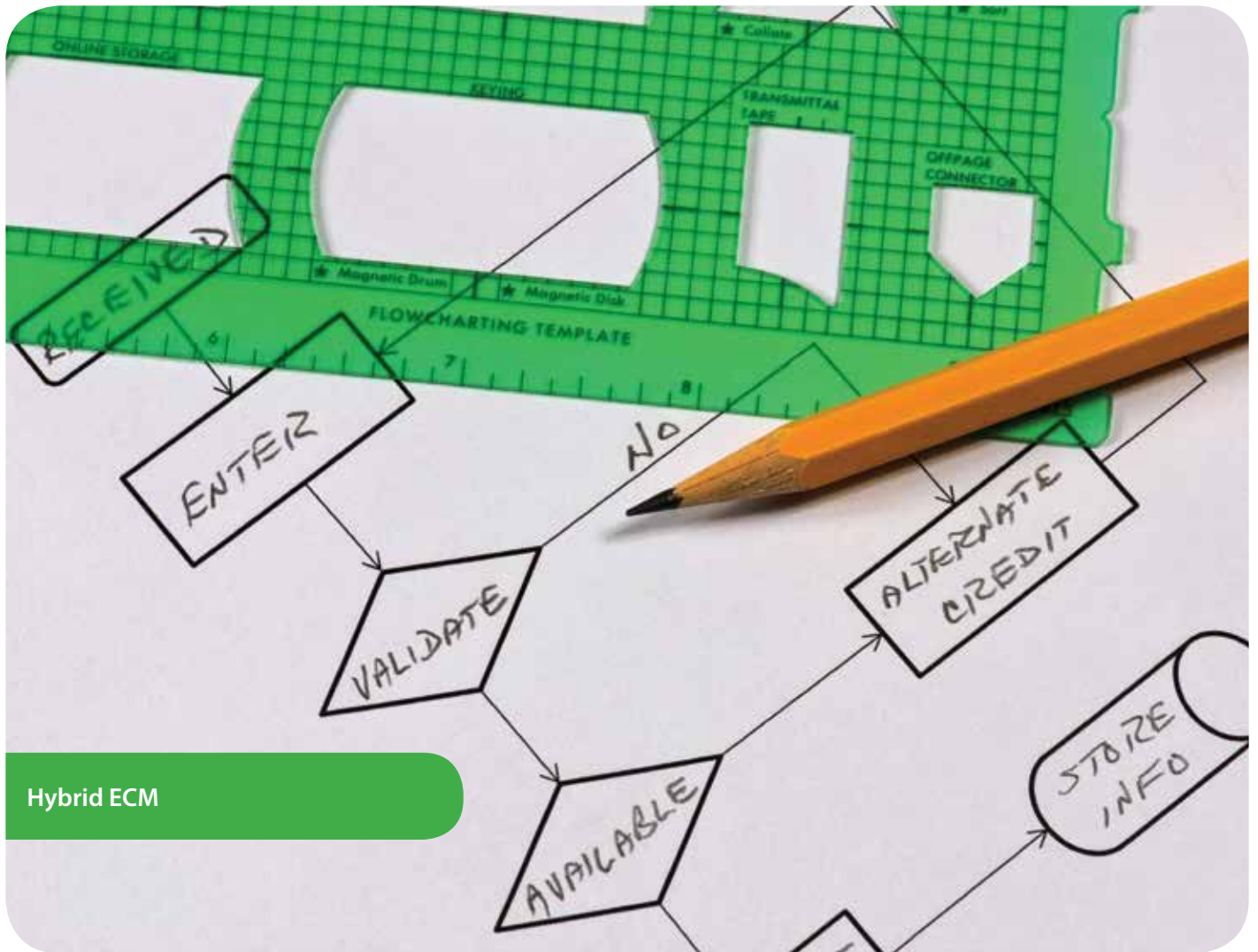
The solution ensures that content security is not affected while rendering the content on mobile devices. It supports multiple support devices and operating systems.

With the advancement of features in Mobility solutions, the focus of ECM solutions will be on Mobility and providing access from anywhere and anytime

Output management relates to content types such as letterheads, invoices, correspondence, marketing material, policies and statements. Current ECM vendors have provided components for managing these documents which can easily integrate with core ECM components.

Output Management helps in engaging with customers by providing relevant information, easily ranging from one on one contact to high-volume, mass-produced documents. This helps in streamlining document related business processes, such as payment facilitation and statement generation, providing business users with hands-on control of these documents.

Going forward, we will see tighter integration of ECM with Output Management products for the end to end management of different kinds of content in an organization.



Hybrid ECM

Over the past few years, organizations have moved or planned moving their applications to cloud platforms. Traditionally, ECM deployments were done using on premise servers. There are various benefits for organizations to consider cloud deployment of ECM applications such as less TCO through economy of scale, better management of servers, and better reliability and scalability features.

In the last few years, organizations have considered hosting ECM data on the cloud although the adoption of cloud deployment has been slow in this space. The impeding factor here is the data security concern with regards to the movement of confidential data over the cloud.

Generally, ECM systems are well integrated with other systems for data interchange. The requirement for such integration (such as ERP or CRM) also presents challenges, albeit usually technical. Sometimes, in this scenario, it is not feasible to just take out ECM servers and host them on the cloud. Moreover, due to compliance reasons, hosting sensitive content outside the firewall presents challenges.

Cloud computing has the potential to reduce ECM project costs while increasing value by allowing the more efficient use of IT resources. The challenges that limit ECM deployment on cloud have led to the development of a Hybrid ECM model.

In this model, some of the content can reside within the firewall on premise servers and the remaining content can be stored in cloud servers. Documents that need to be shared with external stakeholders (partners, suppliers, customers), and those that do not entail high levels of security, can be moved to the cloud platform. Leading ECM vendors such as OpenText and EMC have acquired startups, such as Tempo and Syncplicity, which provide cloud based file management systems. Organizations pursuing hybrid ECM have to ensure proper Information Governance to determine distribution of content in a well-defined manner. Going ahead, organizations would consider Hybrid ECM in their ECM strategy roadmap.



Customer Enablement

The growing expectation from the ECM system will be to provide the right information to the right user at the right time. This will provide customers with a better experience and will result in better organizational branding. For transactions such as insurance renewals and online purchases, there are various forms to be managed by customers. Online forms will enable quicker turnaround time and better user experience for organizations.

Electronic signatures are gaining momentum due to the rapid evolution of consumer technology, the need to reduce transaction costs and the time to close business. Electronic signatures are becoming simpler, more accessible and cheaper with the advent of tablets and touchscreen computers.

There are specific eSignature product vendors such as DocuSign and Silanis which provide enhanced functionalities and integration capabilities with core ECM products. This has helped ECM solutions provide better customer enablement features. eSignature solutions support various document formats and users at multiple locations, while addressing their region specific needs.

There are various types of eSignatures available. Organizations can choose from a set of defined eSignature formats based on their business domains and legal acceptance.

eSignature solutions can be extended to the content management and output management capabilities of products in this space which, in turn, will help provide end to end solutions. The leading ECM/ DOM products in the market provide seamless integration with various eSignature products. Enhanced safety, security and risk minimization measures are put in place, with stronger and complex authentication options, to protect data and documents to the highest possible means. Through multiple authentication mechanisms and controlled user authorization, robust integration can be established. eSignature solutions support audit trail capability to record different actions performed on a document during the signature process.



Customer/Employee Engagement

The advent of social media has raised customer expectations on ECM and its capabilities. When a customer asks for specific information it is very important to provide it in a quick and timely manner. Through campaign management, a segment of ECM, organizations can provide functionalities to customers such as promotions and newsletters based on their preferences.

Organizations will continue to utilize social media platforms to reach out to customers and receive feedback on various offerings. Organizations will implement solutions to enable customers to have greater control through the management of various activities such as bill payment,

report generation and viewing of past transactions without any external involvement.

ECM, through the collaboration segment, can help in improving agility and responsiveness. It can help connect people and processes in an organization to share ideas, experience and knowledge. In scenarios that require project teams to be globally distributed, ECM will help teams handle shared knowledge, improvise processes and handle timely deliveries across geographic and departmental boundaries.

The collaboration application can help teams work effectively by making features such as forums, blogs, wikis and chat messenger accessible for instant knowledge sharing. Going forward these tools will be better integrated with content repositories to prevent information redundancy.

Core ECM products with collaboration functionalities will help customers manage organizational content through social networking tools by leveraging ECM security and permission policies. ECM will help connect employees, customers and partners across geographic, departmental and organizational boundaries for more efficient information exchange leading to well-informed decision making.

About the Author



Vineet Saxena is a Senior Technology Architect at Infosys Digital practice with over 14 years of experience in implementing IT solutions for various customers across the globe. He specializes in the Portal, Content Management and Collaboration domain and has experience implementing leading products having an offering in this domain. He has written various white papers and blogs in this area.

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