### A Research Framework OF Oracle Universal Content Management (UCM) An Impact on Enterprises/Organizations:

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#### Abstract

Universal Content Management (UCM) also called web-center content gives a "bound together application for conveying record administration, web content administration, computerized resource administration, and maintenance administration. The suite of items offers an adaptable, hearty and versatile substance administration arrangement that permits representatives, clients and accomplices to work together contribute and access business content anyplace around the world. Oracle UCM helps organizations completely boost the estimation of their data and scholarly resources by bringing content, for example, contracts, showcasing materials, computerized resources, records and inventories, to the Web where it can be productively overseen". Oracle webCenter Content (UCM) gives a brought together vault and filing framework to house unstructured substance, empowering associations to convey it to business clients in the best possible configuration. "This study is going to provide an oracle based UCM that manages all your unstructured content, from documents to video files, in one place and leverages all the advanced capabilities of the Oracle web-center Content platform including document archiving and document management. The utility of our aim is to provide UCM platform can grow with any organization and make it easy to manage billions of content items and support hundreds of thousands of users".

Keywords: Oracle UCM, Oracle ECM, Enterprise Content Management, Oracle Webcenter Content, Data Management System, Document Management Solution, Big Data Management, Universal Content Management, Digital Asset Management.

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#### 1. Introduction

Enterprise "Content Management (ECM) is getting a great deal of consideration in partnerships around the globe today. Organizations make a lot of

unstructured substance as archives, filtered content, recordings, photographs, pictures and so on. A few insights demonstrate that more than 80 percent of an enterprise's protected innovation exists as unstructured information. In the event that a lot of an organization's licensed innovation exists in an unstructured arrangement what amount of time do representatives spend looking through the corporate system to find and accumulate data? What amount of circle space do we devour sparing a great many copies, endless supply of substance just so we can think that its later just to discover we overlooked where we put it? This is the place ECM framework comes in to play". Clearly When large volumes of archives are created, it will hard to oversaw [1]. There is a need to designed and oversee unstructured substance, authorize rules, security web distributing, give archive administrations to business frameworks, and numerous different capacities relying upon item offerings and corporate needs. An issue that leaves this situation is that



both the business procedure show and in addition the information demonstrate should be coordinated eventually of the advancement procedure of the framework [2,3]. Several efforts have been done to resolve above mentioned issues and many authors have made their contribution accordantly. Yao [4] expressed that numerous issues will emerge when we are managing conventional paper-based archives. A few examinations have demonstrated that the utilization of electronic records administration bring forth establishments that create productive administration and exemplary execution also [5]. Oracle webcenter focus oversees data you utilize each day, found in messages, reports, notices, slide introductions, and that's only the tip of the iceberg. As per [6], the majority of the issues found in overseeing physical paper archives are likewise present in overseeing electronic reports. "Oracle webcenter stores it, sorts out it, and secures it with the goal that exclusive the general population requiring the data approach it. Also, in particular, it causes you discover it immediately when you require it and view it through a standard web program, regardless of the possibility that you don't have the product that made the record. Correspondence energizes associations and encourages them successfully facilitate and execute everything from worldwide marketable strategies to individual undertaking records. Vital data in the present associations is caught in office records, individual email, reminders, video gatherings, and an assortment of different sorts of unstructured. Left unmanaged, basic data is lost, business forms end up noticeably stressed, the opportune individuals don't have the correct access to archives, and you settle on poor choices in view of off base and obsolete data. Dependable archives ought to be guaranteed of their quality in conveying precise portrayals of whatever data is reported [7]. The proposed look into plot in view of Oracle webcenter gives you a chance to discover basic data in an agreeable situation, with applications you as of now utilize each day".

# 2 Advantages of Oracle Universal Content Management (UCM):

In Today's World we are facing a lot of "Hurdles like Data that isn't proactively overseen brings about asset bottlenecks, lost records, copied information, /Documents security and variant control issues, lost efficiency, furthermore, choices in light of wrong data [8]. Oracle Universal Content Management otherwise called Oracle WebCenter , a honor winning venture administration (ECM) stage, deals with the whole range of unstructured — from archives, designs, and Web pages to examined pictures, email, and records and so on".

#### 2. 1 Offer across the Enterprise

It is extremely hard to impart to clients, accomplices, and providers over the venture/Organizations and outside the firewall when it is put away in divergent frameworks. "Although numerous associations have utilized workaround, for example, FTP destinations, they think that its hard to control access and security. Without mechanisms set up for variant control or the "locking" of records, numerous adaptations of a report wind up being made and shared 0. Oracle Universal Content Management transforms into resources by making unstructured less demanding to discover, get to, and reuse inside an association. Oracle Universal Content Management changes over 500 record configurations to Web-prepared organizations, for example, HTML, XML, GIF and PDF, and conveys through Web destinations, desktops, truly straightforward syndication nourishes, cell phones, and Web administrations and so on [9]".

# 2.2 Computerize Expensive, Time-Intensive, and Manual Processes

Numerous associations burn through a large number of dollars consistently on printing, creation, and transportation costs for sharing manuals, specialized particulars, illustrations, reports, and other printable substance [10]. With Oracle Universal Content Management, you can safely share and disseminate through Web locales and Web applications. "Oracle Universal Content Management will likewise help take out excess strides in your procedures and can mechanize manual advances, for example, changing over things to Web arranges and directing substance to various clients or offices for audit and endorsement. Also, Oracle Universal Content Management mixes well into existing business forms by enabling substance proprietors to keep utilizing natural desktop applications, for example, Microsoft Office and Outlook, Autodesk AutoCAD, Lotus Notes Email, and Oracle Star Office [11]".

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#### 2.3 Manage Content all through Its Lifecycle

"Oracle Universal Content Management manage the whole lifecycle, applying the proper measure of control and including extra help for clients amid each lifecycle stage. This implies is overseen amid creation, catch and capacity. Extra highlights can be connected, for example, rendition control, ordering for hunt, metadata and security as appeared in figure 1. At last, administrations can be added to help convey, distribute, order and hold, lapse, and erase [12]".

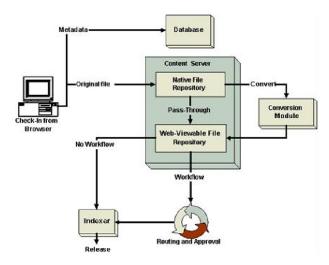


Fig. 1.UCM life cycle

#### 2.4 Saves Your Valuable Time

How long have you spent endeavoring to discover one basic piece of data about a task, client, or lawful test? Is it safe to say that it was in an email? Did you see it in a slide introduction? Oracle Web Center Content conveys an effective method for looking to enable you to recover the data you require rapidly.

#### 2.5 Decreases Your Risk

"With the expansion of documentation-serious consistence commands, the need to store and recover consistence confirm has likewise expanded. Utilizing Oracle WebCenter Content records administration abilities empowers you to oversee Records and maintenance strategies and effectively recover the data, sparing you time and diminishing your hazard [13]".

#### 2.6 Addresses Your Issues

"In the event that your administration needs reach out into rich media enterprises, for example, promoting, remove learning, web advancement, or other line of business requiring utilization of pictures and video, Oracle Web Center Content enables you to oversee such computerized resources just and viably and store high-determination source recordings on one server while resized changes are served out of a different streaming server. Or, then again aggregate promoting guarantee for an inventory in a folio, course it through a work process, at that point compress it into a packed document for conveyance to a seller. Every one of these alternatives are conceivable with Oracle WebCenter Content [14]".

### **3. Concepts of Oracle UCM (Enterprise Content Management)**

Oracle WebCenter gives programmed framework to sharing, overseeing, and circulating business data and . This data can be in archives or some other sort of , and in this guide the terms record, , and document are regularly utilized conversely. At times, for instance if picture transformation is empowered, various records might be overseen together as one report. Whatever term is utilized, the data is being put away electronically and is overseen as a solitary thing. Oracle WebCenter Content deals with the thing by giving a way to you to discover the data you are searching for while controlling access to the record so just approved individuals can utilize it [15]. You can get to current data inside seconds from web program. You can undoubtedly make and deal with any essentially kind of , including records, reports, solicitations, designing illustrations, spreadsheets, manuals, deals writing, and the sky is the limit from there, in just a single capable administration framework. For run of the mill business report administration, overseeing recordings, pictures, or records, Oracle WebCenter Content gives a completely highlighted and common place client encounter. Not with standing getting to your through a web program, Oracle WebCenter Content gives a few other options to the individuals who need an affair more incorporated with their office applications, as Desktop and WebDAV interfaces enable you to perform essential administration activities from your desktop utilizing organizers and records to speak to reports.

### 4. Framework of Oracle UCM (Also Known As WebCenter Content):

"Oracle Content Management is an arrangement of industry-driving arrangements that conveys another level of joining and profitability over the whole range of unstructured data. Building a vital endeavor content administration foundation for data and applications causes



you to diminish costs, effectively share content over your undertaking, robotize costly, time-escalated and manual procedures, and merge different Web destinations onto a solitary stage for brought together administration". The UCM Quick Start Service provides an easy way to fast track your Oracle Content Management implementation projects by leveraging Oracle UCM Experts. Our Oracle experts will work with you to deliver an out-of-the box production-level pilot implementation of Oracle UCM tailored to your business needs and provide a complete knowledge transfer to your employees enabling you to progress to the next steps in your implementation with confidence. "Oracle Universal Content Management (UCM) is the business' most bound together endeavour content administration stage. Oracle UCM empowers you to use advertise driving archive administration, Web Content Management, advanced resource administration, and records maintenance usefulness to assemble and supplement your business applications". Do you want to take your first steps with the Oracle UCM product but are unsure as to how to begin? If yes, Oracle Consulting can guide you along, using a proven approach, with welldefined steps and activities [16].

"Our Oracle Experts will show you the most appropriate ways to implement the Oracle UCM products, and help you avoid the typical pitfalls. The result will be an operational production system, and trained personnel that will be actively involved in the project. This service is a typically a 20-day engagement which will require participation from key resources in your organization. The implementation is workshop-driven and focused around the 5 main steps outlined below. For each step, the purpose, key activities, and required participants from your organization are detailed. This approach is based on the experience our consultants acquired in doing multiple projects and covers the typical steps you need to consider when implementing a Content Management Solution".

#### 5. Oracle UCM System Functionality:

If a non-technical, functional user wants to use Oracle UCM. So that particular user required a user-friendly Interface Software In today's World, so if a user is not belongs to a technical background even then that they can use this software easily. Oracle UCM provides a very vast User-friendly Interface as shown in fig 2.



Fig. 2. Friendly user interface of UCM

#### 6. Big Fishes Already In the Game: Clients of Oracle Universal Content Management (UCM) In International Market:

There are already a Big Organizations and the Enterprises in the game. Below mentioned organizations already used Oracle UCM Successfully. And take a huge amount of Benefits not only in the form of time or technology also in the form of revenue as shown in figure 3.



Fig. 3. Big Organizations already used oracle UCM.

# 7. Integration with Other ERP Systems and Applications: (Oracle UCM is a Part of Fusion Middleware):

"Oracle Content Server not just fills in as a data administration answer for content-driven sites, yet additionally gives a versatile data administration foundation that backings various venture applications in numerous assorted situations and stages. The incorporation arrangements empower other undertaking applications to get to content oversaw by the data management administration framework and give these

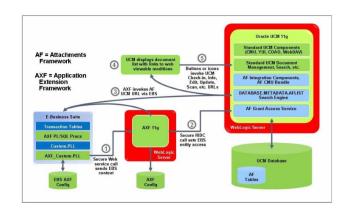


applications basic content management administration abilities, for example, full-content and metadata seeking, library administrations, work process, membership notices and data change capacities through a wide exhibit of coordination techniques".

"When all is said in done, these joining systems serve to decipher or pass strategies and related parameters with the objective of executing Oracle Content Server administrations. Figure 4 is demonstrating the different Oracle Content Server administrations are the "window" for getting to the substance and substance administration works inside Oracle Universal Content Management. For instance, one basic coordination alternative is to reference content that is overseen inside Oracle UCM by determined URL. Other joining choices are to utilize the Java API, the Microsoft Component Object Model (COM) interface, or the ActiveX control".

#### 8. Why Oracle UCM Have A Very Power Full Impact as Compared With Other Solution:

If we compare Oracle Universal Content Management with other Custom made Content Management Systems, then there is a very vast difference in the performance and the modules between them. Oracle spends a huge amount of revenue only for Research of UCM Oracle Middleware Product. If we are using Oracle UCM instead of any other PHP, .NET or other Programming Language Custom Made Content Management System, so we are not only avail content archiver solution, but also avail the other Digital asset management, workflow management, retention and other metadata capabilities facilities as well. If you are using Custom made Content Management Solutions that are already available in a market or industries, then you are only avail or facilitate the Content Manager or Archiver Facilities. But by using Oracle Universal Content Management Solution, you people are able to run your whole organization by this product. By using Oracle UCM, you also don't need to implement any User Security Products like Microsoft AD. Oracle UCM has a very vast Users Security Rights Policies and roles Module. That will make your organization stronger or secured from everything.



#### 8. Conclusion:

This study (Oracle UCM) introduced a new paperless world with the most unique and latest functional Scenarios to the Organizations/Enterprises. By using Oracle Universal Content Management organizations are not only maintain their Content but they are also able to maintain their whole organization structure by using Oracle Webcenter Content other features like Workflows, Criteria Workflows, User Securities, Roles, Rights, Authorities, Metadata Configuration etc. Companies will become more powerful by integrating their existing environment with the Oracle UCM. The key point of this whole proposed methodology is that once Organizations start Moving to Oracle Universal Content Management UCM they will not only becomes Powerful but they are also Includes in the International Market because in today's world most of the Big Companies are Using Oracle UCM. Oracle basically designed this Fusion Middleware Product "UCM" after spending their revenue on research. So now you can Judge by your own self that how powerful this product is.

#### 9. Acknowledgement:

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#### References

1. Finch E.F., R. Flanagan and L.E. Marsh.: Electronic Document Management in Construction using Auto-ID. Automation in Construction, 5(4): 313-321 (1996).

2.Boonyathan, P. and L. Al-Hakim.: Procedure for Modelling and Improving E- SCM Processes. E- Supply Chain Technologies and Management, pp: 1-21 (2007).

3.Hee, K.V., J. Hidders, G.J. Houben, J. Paredaens and P. Thiran.: On the Relationship Between Workflow Models and



Document Types. J. Information Systems, 34(1): 178-208 (2009).

4.Yao,Y.H., A.J.C Trappey, P.S Ho:. XML-based ISO9000 Electronic Document Management System. Robotics and Computer-Integrated Manufacturing, 19(4):355-370 (2003).

5. Xiaomi, A:. The Electronic Records Management in Egovernment Strategy: Case Studies and the Implications. International Conference on Networking and Digital Society, Guiyang, Guizhou, China, pp: 17-20 (2009).

6. Bantin, P.C:. Recordkeeping Systems: Understanding Data and Information Systems for Recordkeeping. New York: Neal-Schuman Publishers, (2008).

7. Gilheany, S:.Brief Overview of Document Management.Retrieved 15 February, 2010, from http://www.archivebuilders.com/whitepapers/21954 p.pdf (2003).

8.Oracle Online Documentation Library, https://docs.oracle.com/cd/E28280\_01/doc.1111/e26695/intro.ht m#WCCUS2241

9.Oracle help Center Library, https://docs.oracle.com/cd/E28280\_01/doc.1111/e26695/intro.ht m?#WCCUS1696

10.World Applied Sciences Journal 12 (Special Issue on Computer Applications & Knowledge Management), http://idosi.org/wasj/wasj12%28CA&KM%29/9.pdf

