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Content Management in Healthcare

**Background Information**

Content management is the process of organizing, collecting, and analyzing information in order to gain insight into operations and manage them effectively. Content management in healthcare is particularly beneficial, as it allows one to gain an understanding of how effectively healthcare systems are working, the value output towards patients, and how to further optimize processes. Content management systems (CMS) are used in such processes and are software applications that are used to create/manage digital content, as well as provide intuitive user interfaces that allow easy content modification. Content management systems consist of two major components, content management application (CMA) and content delivery application (CDA). The former allows non technical users to edit website content without a webmaster, while the latter is a backend process that stores input from the CMA and visualizes it to users.

**Healthcare Applications**

While content management systems have many uses in healthcare, the most impactful way to utilize them would be to address summarization of content and conversion of written policy into programming languages/models. To summarize content, a CMS should implement an accessible environment that non technical authors are able to navigate, with the ability to use all tools and features. The accessibility this interface would provide would be more effective, as it would allow for multiple user access and a division between content and presentation, allowing for publication in various formats.

To convert written language into programming models, a CMS should be able to understand the rules or course of action present within the written text, to be able to apply it to a program. Creating identifiers for the rules/actions in the text can be applied to the program, so it knows that a certain identifier means a certain action must be undertaken. Quantifying the written actions would make it easier to train the model, and the output could be better analyzed to see if the numbers match with predicted results. The model should be trained with various datasets, so it can eventually create identifiers itself and figure out how written guidelines can translate to program syntax. A natural language processing (NLP) would be able to learn this process quickly, as it would understand the structure of written language. However, for cost effectiveness, the most efficient and simple method should be used; therefore, any model that uses machine learning and can be programmed to predict a certain output can be used, as long as a system is created to break down written language in a manner the model can follow.

**Further explorations**

While content summarization and conversion of written policy are both impactful endeavors Cotiviti can continue to explore, cybersecurity in content management is equally important. As content management systems are important for user navigation and authoring, it is crucial that the information they store is secure and cannot be accessed by unauthorized users. This can be done by encoding the data and have strong authentication protocols. Data governance should also be monitored so the quality of incident response can be addressed. This can be done by ensuring the same procedures used to create a CMS are implemented to create guidelines or even a whole other system to create and monitor cybersecurity procedures.

Works Cited

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