

Implementation of the Electronic Document Management System in Joint Services Council for Irbid Governorate

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Abstract: An electronic document management system (EDMS) is a software program that manages the creation, storage, and control of documents electronically. The new electronic document management system should include different types of incoming and outgoing documents while ensuring safe access to data in the system where the project identified additional steps and procedures applied to the current EDMS method to make sure that it covers the whole process of creating for a new system Joint Services Council (JSC) for Irbid Governorate as designing new EDMS through using Rich picture technique and Strategic quadruple SWOT analysis then updating Rich picture diagrams of the new system where the proposed framework is applied to an EDMS to demonstrate how the method can be used practice the framework evaluated recommendations for further research are suggested.

Keywords: EDMS, Rich Picture Technique, Strategic quadruple SWOT analysis.

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تطبيق نظام إدارة الوثائق الإلكترونية في مجلس الخدمات المشترك لمحافظة إربد

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المستخلص: نظام إدارة المستندات الإلكترونية (EDMS) هو برنامج يقوم بإدارة إنشاء المستندات وتخزينها والتحكم فيها إلكترونياً. يجب أن يشمل نظام إدارة المستندات الإلكترونية الجديد على أنواع مختلفة من المستندات الواردة والصادرة، مع ضمان الوصول الآمن إلى البيانات في النظام حيث حدد المشروع خطوات وإجراءات إضافية مطبقة على طريقة EDMS الحالية للتأكد من أنها تغطي عملية الإنشاء بأكملها لنظام جديد في مجلس الخدمات المشترك (JSC) لمحافظة إربد حيث صمم EDMS جديداً من خلال استخدام تقنية الصورة الغنية وتحليل اسوات الرباعي الاستراتيجي. وأخيراً تحديث الرسوم البيانية الغنية بالصورة للنظام الجديد حيث يتم تطبيق الإطار المقترح على EDMS لتوضيح كيفية استخدام الطريقة عملياً. يتم تقييم إطار العمل واقتراح التوصيات لمزيد من البحوث. الكلمات المفتاحية: نظام إدارة الوثائق الإلكتروني، تقنية الصورة الغنية، تحليل اسوات الرباعي الاستراتيجي.

1. Introduction

The concept of the electronic document management system is a fact a group of technology with the demands of customers and the documents that the Joint Services Council for Irbid Governorate sends and receives, which can be scanned and entered into the system. The current research provides detailed information related to Electronic Document Management Systems (EDMS) and Rich Picture Technique related Go to the application of Electronic Document Management Systems in the Joint Services Council for Irbid Governorat.

Currently, The Joint Services Council for Irbid Governorate organizes the documents manually, which leads to difficulty in the management of these documents and results in many problems such as (Reservation of a big place to store documents loss of some documents, the loss of time, and money, delay of the document etc.).

Therefore, to help the Joint Services Council for Irbid Governorate to solve the problems that result from the management of documents manually, we will use technology that facilitates organizing the documents and management information accurately, and in compliance with regulatory requirements for documentation.

The Electronic document management system provides a secure and stable environment for documents at the Joint Services Council for Irbid Governorate because a lot of a document must be retained as a reference and should be kept to provide a historical perspective.

The work is done to develop a strategic plan for the Joint Services Council for Irbid Governorate to manage documents electronically through the examination and retrieval of documents by giving a classification to the files and giving the number and date for the document automatically from the system, any requested reports or documents, the system of electronic storage of documents will be working on executing the request and print of reports or documents upon request.

The Joint Services Council for Irbid Governorate is responsible for Receiving waste from municipalities, factories, and olive presses, therefore, the Joint Services Council receives a huge amount of documents and reports in addition to requests from customers. All these requests that have been received and answered are stored in the archive and will be given the number and date manually to facilitate the process of saving and restoration where distributed manually.

Accordingly, we have a set of goals to achieve in this study, and the achievement of these objectives will be through the management of these documents electronically.

The research seeks to achieve the following objective :

Evaluating the Rich picture technique will be discussed their usage in an EDMS for Joint Services Council for Irbid Governorate.

- Produce a recommended strategy to utilize Electronic Document Management System appropriate to the Joint Services Council for Irbid Governorate.

- Articulating evaluate Electronic Document Management Storage System appropriate to the Joint Services Council for Irbid Governorate to critically evaluate the research.
- Application of EDMS to facilitate the process of document management and to clarify the procedures that can be used to improve the way EDMS through the development of a strategic plan for the implementation of EDMS in the Joint Services Council for Irbid Governorate.

This is a paper on the study of electronic records management in the Joint Services Council for Irbid Governorate therefore we will define the limits undertaken within the project working within the research and will make it clear in the scheme below (Figure 1).

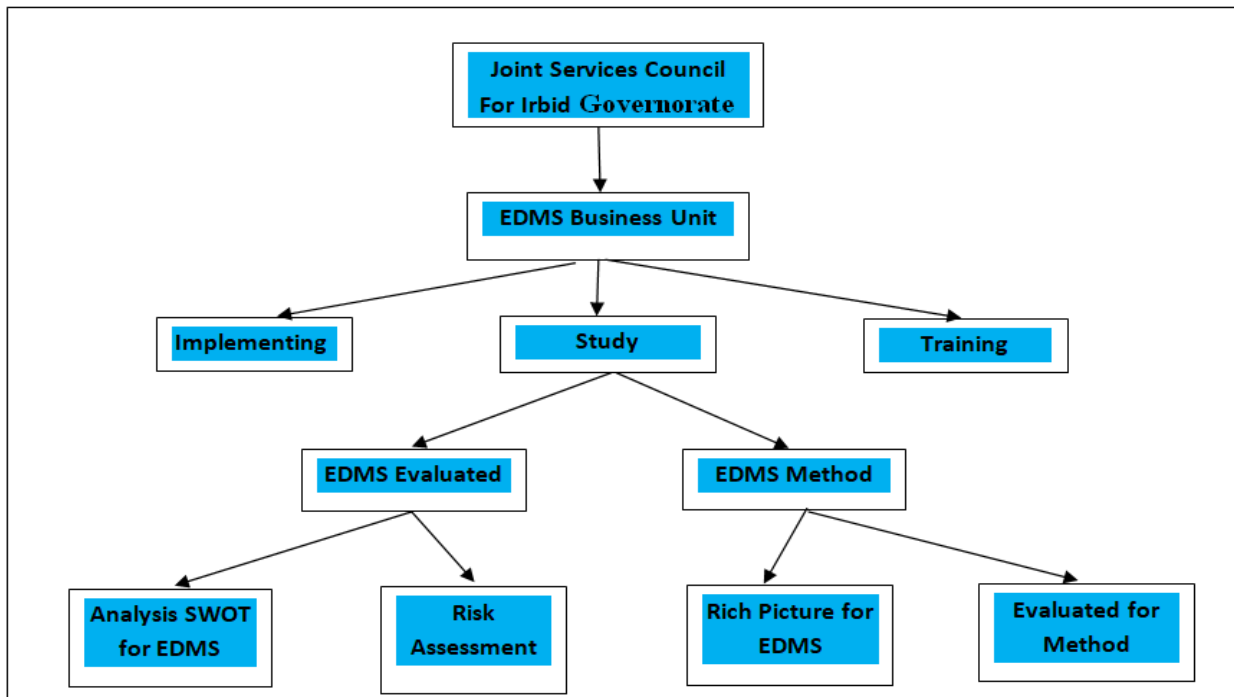


Figure 1 The study boundaries

In general, study management will be about Electronic Document Management Systems and control of customer orders that will be successful as help the Director of IT and his team at the Joint Services Council where the information technology department staff are more aware of the subject.

There will be an analysis of project management through SWOT Analysis and Gantt charts that will show and clarify the concept of project management as well as risk management.

2. Related Works

The methodology is Indicate a strategy through which to achieve the desired goals, a search of the subjects about the relevant literature to see what others have done in this subject that also helped in knowing how to apply this EDMS. In addition to some systems being used and applied in Jordan, such as the system used in the Greater Amman Municipality and the system used in the House of Representatives, where these systems succeed in applying EDMS.

During the implementation of the project, we worked on the literary review whereas the previous studies have noted that these studies focused on the EDMS and how to apply it and the electronic storage of documents. To reach the characteristics that support the application of the EDMS.

In addition, the review some studies that have published literature about the use of Rich Picture as it's more effective, and we will use it to explain how to EDMS and storage methods for documents. Most of the information was obtained from the Yarmouk University Library, Internet, and online journals.

Accordingly, we want to achieve the objectives and implementation of electronic document management in the Joint Services Council for Irbid Governorate.

Electronic documents are the proper place for storage in the era of the Internet, such as (Html., xms., Pdf., Doc, etc.). The electronic records management system causes a global revolution in public and private sectors, where the application of such a system has made remarkable achievements in the efficiency of the work, improved customer service and reduce the cost of organizing the documents.

The Director of the records of the Arkansas electronic cooperatives (AEC) in 2006 noted that records management has become very difficult, where the AEC need help in records management to facilitate documents organization and facilitate the rapid access and retrieval of information, the solution is to organize the electronic documents. In his study, (Rosa, A. T. R., Pustokhina, I. V., Lydia, E. L., Shankar, K., & Huda, M., 2019) focused on EDMS and how to apply it, and he finds out many benefits of the storage of documents electronically.

The National Center for State Courts managed in 1999 to study the feasibility of the judicial authority of Iowa through digital data resources, but there was a weakness in the feasibility study. In 2008 Iowa legislative services agency fiscal services focused on the management of electronic records management through Holly Milyons and the judiciary was chosen to participate in the project contract that included electronic documents management system, this project ended on 17 October 2008.

3. The Theoretical Framework of The Study

This study we present two important aspects of the research looking at the Rich Picture technique, which is part of the EDMS framework, and a diagram or diagram, usually hand-drawn that depicts certain important aspects of a situation.

This topic discusses a proposed EDMS framework for developing new business processes for the Joint Services Board of Irbid Governorate. This framework is built based on the existing EDMS method. as this provides a comprehensive assessment of the study through a strategic four-way SWOT analysis that shows perceived strengths, perceived weaknesses, perceived opportunities, and perceived research leads. In this study, some applications were running on the EDMS, for example, In (Frappalo, C., 1995) worked on EDMS by Lockheed Martin energy systems and evaluated the optical storage for EDMS.

However, we will discuss the strengths and weaknesses of the research framework, which will be critical in the SWOT analysis. Finally, the overall success of this research will be linked to the evaluation by reaching goals and objectives.

This study discusses the issue of integration for a Rich Picture to document management systems electronically. The objective of the Rich Picture is to examine and provide new employment for processes of new work.

Drawing Rich Pictures enables stakeholders to establish the current business state and define the ill-defined situations (Fadhil, N. F. M., 2022), it is used for the establishment processes of new work.

The application of Rich Picture Based on the processes of new work and based on the analysis SWOT that uses the analysis to determine strengths, weaknesses, opportunities, and threats for the application of Rich Picture for electronic document management system in the Joint Services Council for Irbid Governorate.

EDMS is a way to organize and facilitate the management of documents and requests for clients on the computer and the Internet to use Email or the transfer of documents and requests customers to digital pages through a scanner. Hence, "The EDMS technology provides the key functionality we need, and with the advent of this same functionality over the Internet" (Ayaz, A., & Yanartaş, M, 2020).

EDMS has been used to help organize the electronic documents for ongoing work improve and increase the efficiency of work and the achievement of strategic objectives and facilitate customer service and facilitate the process of storage and management of these documents.

A Rich Picture is used to provide a model for thinking about the user system and to assist the analyst to understand the situation, Rich picture do not accurately explain the system, but give a clear vision of the system to make it easier to understand. (Walker, D., Steinfors, P., & Maqsood, T. 2014) stated that Rich Picture Techniques are similar to a brainstorming session, but represent the various ideas in pictures rather than in words.

Rich Picture is the expression of art therefore it is not considered true or false in any case. Hence this research represents the installation and operations of the system for the management of electronic documents management.

We used the Rich Picture for helping to clarify the existing tools in the new system, such as the online item and the database used for storage and document management as well as to clarify the processes of the plan of the new system (EDMS). An example of a Rich picture is displayed in Figure 2 below.

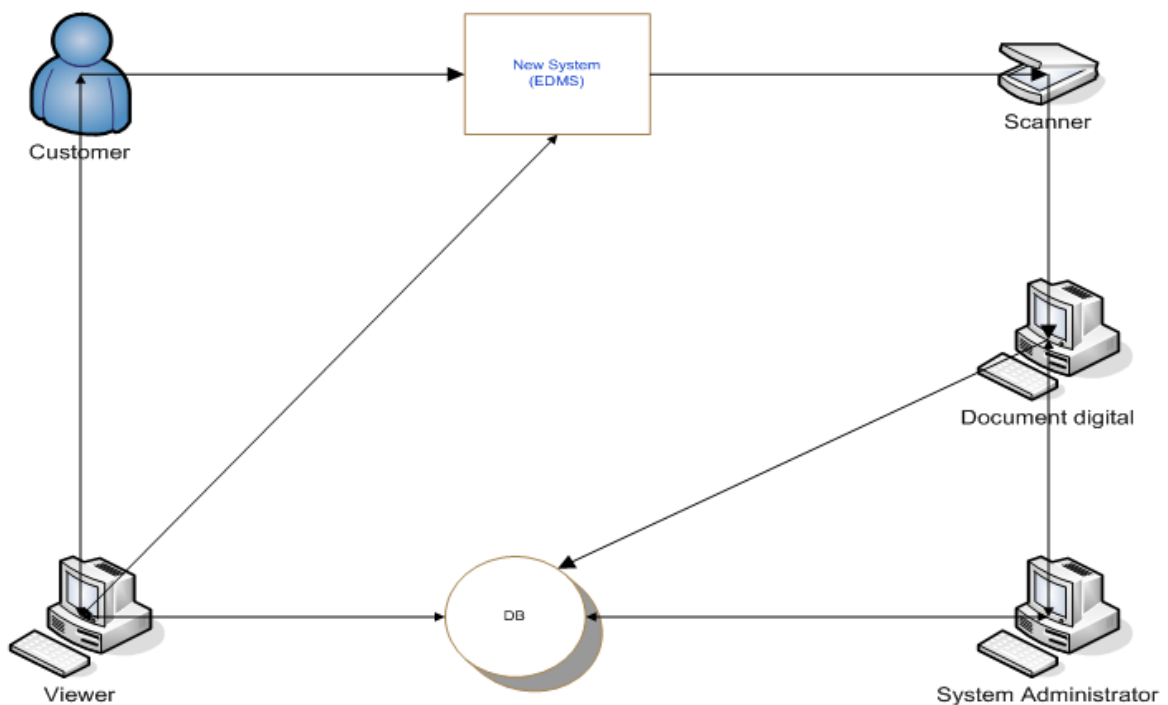


Figure 2 Rich picture of a new system

- Customers such as (municipalities, factories, olive presses, regular customers, and others).
- System administrator: Employee who carries on the following work (Scheduling, Management, Reporting, and Resource mentoring).
- Viewer: Employee who carries the following works (Query, User, search, View, and Test).

4- Implementation Using SWOT

The Rich Picture Describe case treatise in general through the picture tied together in a relationship but the problem of the Rich picture is the structural status of those which are open by the views. Hence, the Rich Picture is an SSM technique that represents the relationships between the Clients, Actors, Transformations, World-view, and Owners within the scope of the system of interest (Walker, D., Steinfort, P., & Maqsood, T., 2014).

The Rich Picture is a flexible graphical technique that may be used as a part of the soft system methodology (Horan, P., 2000).and hence Focus Interest is the phenomenon of the Rich Picture they can be disarmed by things that cause problems and view conflicts in the system used where it helps to clarify the lines of communication and equipment in the Joint Services Council for Irbid Governorate, leading to the definition of the problem.

The application of Rich Picture on electronic file management system, which will apply it to files of the Joint Services Council for Irbid Governorate where we noted from this application the following:

- Rich Picture is illustrating the relationship between the stakeholders.

- Rich Picture is a scheme that describes the workflow of the user's system.
- Rich Picture is providing the opportunity for any person to engage.
- Use the picture to clarify the system to absorb lead more easily from describes texts.
- Rich Picture calls for the participation of non-experts.
- Any changes can be made easily to any part of the picture.
- Can the Rich picture represent the functionality of simple to reach the entire system?
- Rich Picture is valid for use by any individual or group.

Although the technology Rich Picture was used by many analysts of systems (Bell, S., Berg, T., & Morse, S., 2019) spoke about some of the weaknesses of the Rich Picture, and (AVISON, D. E. and FITZGERALD, G., 2003) spoke about a high percentage of failure for Rich picture use therefore can cause the use of many obstacles, for several reasons, including:

- From very difficult sometimes to understand someone else where the ideas of people do not have Specific rules.
- From the Possible, the picture means anything which causes ambiguity in the clarification of ideas.
- Rich picture technique is not sufficient to clarify the points of view.
- The Rich Picture does not deal with implementation issues.
- The Rich Picture does not deal with issues related to project management.
- Depends on the skill of an analyst.
- Do not rely on the principles of constant

Based on the Rich Picture we looked for opportunities to design the new system to clarify the modus operandi of the new system to be more effective as the following:

- The possibility of looking to the future.
- Rich pictures illustrating the possibility of developing processes.
- The possibility of expanding outside the framework determining.
- Increase the number of participants in brainstorming.
- Opportunity to clarify the role of stakeholders in the system.
- Opportunity to clarify The scheme workflow to manage files in electronic form.

We are at a Rich picture application on the Document management system we have noted some of the fears and threats that could increase the obstacles in the application of the new system, these threats include:

- Difficult to understand the views of others, leading to potential conflicts.
- Ambiguity in the ideas.
- The difficulty in the management of electronic files, especially when you apply the Rich Picture on the ground.

“Rich picture of the development and current status of service quality research in information systems” (Sylvester, A., Tate, M., & Johnstone, D., 2007) the Rich Picture needs to be creativity and original thought, so after we discussed the strengths, weaknesses, opportunities, and threats for Rich Picture, now we can say that the technology of the Rich picture it helping in the planning of future ministry, which helped to understand and facilitate the work diagram for the management of documents electronically in Joint Services Council for Irbid Governorate, as for the use of the Rich Picture way to organize electronic documents discussed below.

Electronic Document Management (EDM) is the process of transferring, storing, and accessing documents, and records digitally (Guo, F., Jähren, C. T., & Turkan, Y., 2021). Hence, we will be Describing a situation that can be evaluated EDMS through SWOT analysis that will Explain perceived strengths, perceived weaknesses, perceived Opportunities, and perceived Threads for EDMS, and Risk Assessment.

Electronic Document Management Systems (EDMS) has come to refer to the integration of various technologies such as imaging documents, storing, receiving, sending, and querying them upon request. (Zdraveski, D., Janeska, M., & Sotiroski, K. 2019).

The benefits of using to manage electronic documents include efficient email management, less printing, and photocopying, Document-level security and privacy measures, immediate access, and a secure central storage location (Smith, K., 2007). In addition, these strengths, we will explain the strengths of EDMS as follows:

- The EDMS reduces the use of paper.
- The EDMS is Storing and manages large volumes of information electronically.
- The EDMS is reducing the number of lost files and documents where There will be no more lost documents or useless copies of documents
- The EDMS is utilizing automated methods for records disposition in schedules.
- The EDMS is enabling all paper documents to be accessible for ease of retrieval.
- There will be no time wasted in establishing who keeps a document.
- EDMS allows the employees to spend time efficiently.

Using and searching for Documentation in the EDMS system requires a lot of discipline on the part of the staff (Björk, B. C. 2003). And (Maulana, B., Feriyansyah, F., & Sari, R. D., 2022) have Reported on the Electronic Document Management Workgroup for disquisition advantages and disadvantages of EDMS, we will explain the weaknesses of EDMS as follows:

- More complex for staff non-qualification.
- Increase in costs because need to computerize all Joint Services Council, conservancy cyclic of computers and internet network.
- Making training course for staff.
- More complex management and integration for synchronization of multiple local repositories with a central repository.

Based on the document management system for Joint Services Council for Irbid Governorate, we looked for opportunities to design the new system to clarify the modus operandi of the new system to be more effective as the following:

- To Share best practices in management.
- To Develop a policy to enhance the pursuit of opportunities in EDMS.
- To develop a Strategy plan to enhance the pursuit of management in EDMS.
- To Monitor document management.
- To develop qualifications for staff.
- To increase speed for access to data.

When we are applying to EDMS on the Document management system we noted some of the fears and threats that could increase the obstacles in the application of the new system, these threats include:

- Increasing cost because changing the manual system of document management to an electronic system and this needing to computerize all offices of Joint Services Council for Irbid Governorate and Training staff on a new system.
- More complex in document management.
- Frailer strategic planning in the application for EDMS.
- Complex procedures by Joint Services Council for Irbid Governorate may be blocking the application of EDMS.

5- Results and discussion

This study discusses the proposed EDMS framework for developing new management processes for Joint Services Council for Irbid Governorate therefore this framework was built on a basis of an EDMS method. hence, the framework focuses on the aspect of defining and setting new EDMS processes where The framework has three main stages of planning, analysis, and design of The management processes.

This study partially proposes a framework by developing enhancements to the current EDMS method for the Joint Services Council for Irbid Governorate system and introducing new steps in the method based on the best practices and recommended changes, in addition to providing some detailed explanations of how to apply new steps created in the EDMS.

EDMS requires multiple techniques, methods, tools, and skills to manage documents, regardless of their origin, location, form, purpose, or destination. (Nwankwo, W., & Olayinka, A. S., 2019) Figure 3 presents an overview of the proposed framework. The framework has three stages, each requiring some tasks to be completed.

- Stage 1: Identification of business idea.
- Stage 2: analysis of a new system.
- Stage 3: design of a new system.

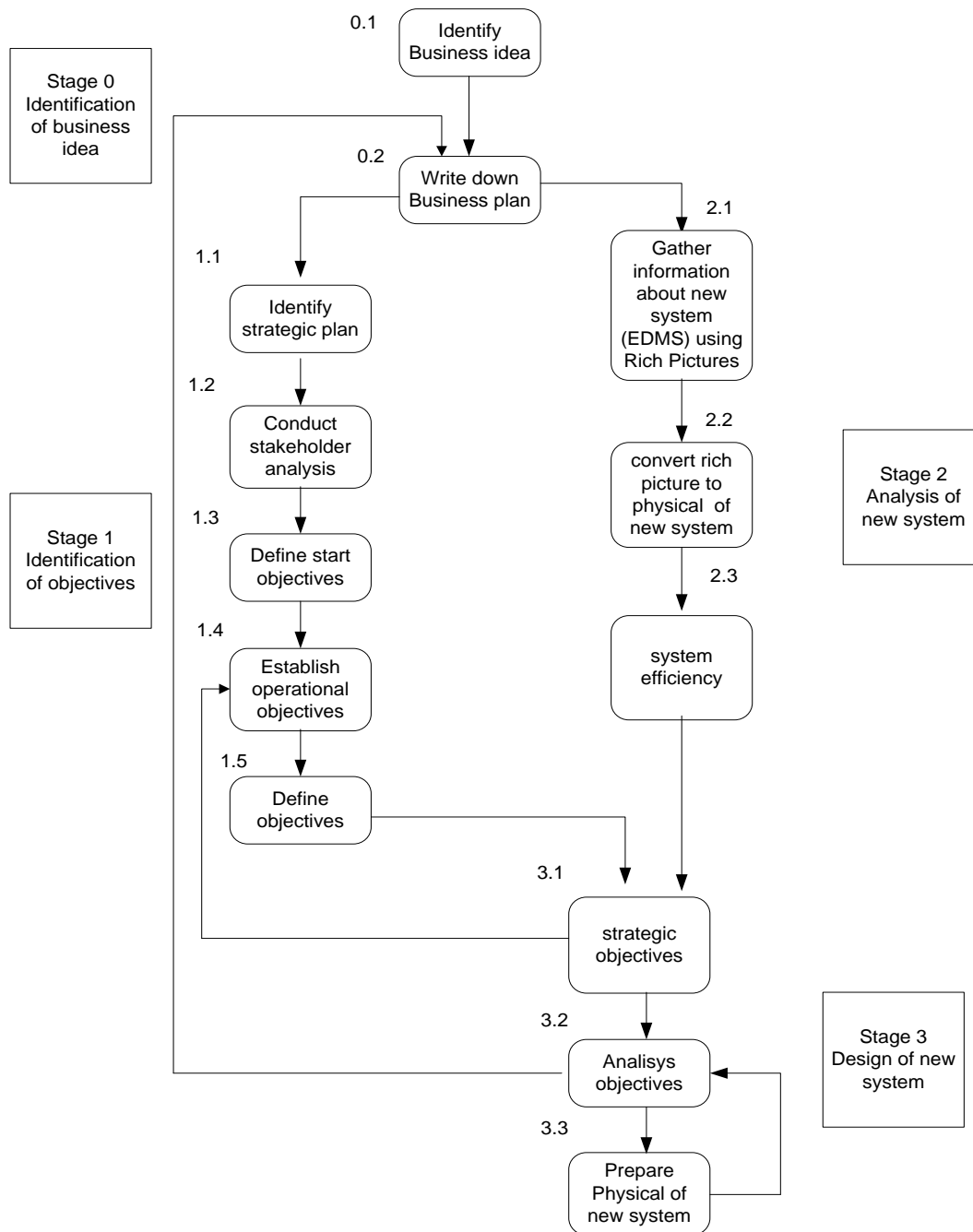


Figure 3 EDMS frameworks (Lejk and Decks,2002)

The steps of the proposed Framework were outlined in Table 3.

Table 3. Overview of the Proposed EDMS Framework

Stage	Step	Description
0. Identification of business idea	0.1 Identify a business idea	Develop and support idea.
	0.2 Establish a business plan	The business plan must be completed with the strategic planning.
1. Identification of objectives	1.1 Identify a strategic plan	Through objectives enhancement.
	1.2 Conduct stakeholder analysis	Using steps 2.1 and 2.2 as a basis, identify stakeholders.
	1.3 define strategic objectives	Defines strategic objectives in

Stage	Step	Description
		operational terms.
	1.4 Establish operational objectives	Through Produce set of operational objectives.
	1.5 Define objectives	Specify the operational objectives in terms appropriate to the notation.
2. Analysis of new System (EDMS)	2.1 Gather information about a new system (EDMS) using Rich Pictures	Gather information about the new system (EDMS) sufficient to draw Rich Pictures.
	2.2 Convert Rich Pictures to physical of a new system(EDMS)	Prepare for the new system (EDMS).
	2.3 system efficiency	System efficiency.
3. Design of new System (EDMS)	3.1 strategic objectives	Using objectives derived in 1.5, enhance those created in 2.3 to create strategic objective
	3.2 Analyze objectives	Conflict arises between strategic objectives, and return to a previous step.
	3.3 Prepare the physical new system (EDMS).	Demonstrate recommended physical implementations of strategically modified logic.

In this section, I introduced new steps applied to the EDMS model for Joint Services Council for Irbid Governorate. The steps were based on the best practices found in the literature review. Also, the analysis and detailed explanation of each step was examined.

Normally, any research is needed to start an idea in addition to needed to develop this idea where is the successful project through a good idea. Hence, it can be just a new system (EDMS) developed in response to expressed needs of the Joint Services Council for Irbid Governorate.

The literature review showed that the main reason leading to the use of EDMS in many organizations where The success of the electronic document management system is directly related to the amount of effort, cooperation, and efficiency of the employees at work (AbdulAzeez, A. D., 2012).

There are many different definitions of a business plan. Therefore, the Proposed Framework Evaluation For a planning tool and EDMS and Risk Management for analysis of a Strengths- Weaknesses- Opportunities-Threads (SWOT) analysis helps EDMS to define the relationship between the internal and external evaluations in strategic analysis (Robson, W. 2015). Employing SWOT analysis identifies optimal strategic objectives.

Strategic planning is concerned with the mission and objectives of a new business. Business planning, on the other hand, is concerned with the actions that need to be taken to achieve the mission and objectives in the shorter term.

The current EDMS works to define and improve the business processes of the system. In contrast, the JSC's proposed EDMS for the new system is drawn based on Rich Picture graphs where Rich Picture enables consideration of social, cultural, political, and ethical issues. Also, based on Rich Picture, ensures business processes are aligned with agreed objectives.

Converting Rich Pictures (step 4) is based on the gathered information about the current system. It requires converting to extract elements and presenting them in a readable layout. Therefore, the process is not hard to complete.

The proposed EDMS framework is fairly comprehensive in developing document management for the Joint Services Council. Hens, The Electronic Document Management System (EDMS) allows citizens to submit documents electronically using personal computers over the Internet. (Holly M. Lyons, 2008) where The results showed that the Rich Picture technique enables to definition of the initial thinking of the new system and the Rich Picture was a good diagramming because it enabled to identification of the new system in a more open form. The electronic document management process has proven to be a powerful communication tool that facilitates the decision-making process by officials (Daniel Sánchez-Martínez¹, Inmaculada Marín-López², Tomás Jiménez-García³, 2008).

The research succeeded in achieving the goals and objectives of the study, where in objective (1) it was necessary to discuss Rich Picture and their usage in an EDMS for Joint Services Council for Irbid Governorate where The analysis and evaluation were carried out to determine the Appropriateness of Rich Picture Technique for the proposed framework.

Objective (2) required Produce of recommended strategy to utilize the Electronic Document Management System appropriate to the Joint Services Council for Irbid Governorate That objective was met by conducting a discussion several times. Best practices that could be used in the proposed EDMS were extracted.

Objective (3) discusses articulating evaluate Electronic Document Management Storage System and Risk management for EDMS appropriate to the Joint Services Council for Irbid Governorate.

For objective, (4) I have presented a complete study. Also the best practices from objective (5) in critically evaluating the research.

Literary sources that were used in the research, the main source were articles, electronic journals, and library books. Using this related website has improved my skills in finding working documents for research centered on EDMS through Rich Picture Technique

Rich Picture aims to describe the case of the problem holistically because aims to gather information wide about the state of the problem.

The same idea applies to EDMS so a definition of the problem phase is very necessary. But we noticed it from useful to use a Rich Picture because it fits with the operations of the electronic documents for the Joint Services Council for Irbid Governorate, and this method provides a radical solution for the problem of documentation for documents in the Joint Services Council for Irbid Governorate.

Rich Picture can be used to design thinking first of the new system, this fact makes the technology an attractive Rich Picture for use in generating new work processes, helping to adhere to the strategic objectives.

However, this proposal contains a hidden threat for several reasons including the possibility of giving false or incomplete information, where knowledge plays in the working environment an important role in the ease of converting to Rich Picture as the Rich Picture stimulate creativity because they rely on the charts open and allow for the representation of the various topics.

6- Conclusion

The electronic document management system will be applied to the Joint Services Council of Irbid Governorate, where the focus has been on analyzing the current system to determine the mechanism for implementing the electronic document management system. The research was undertaken by EDMS in the Joint Services Council for Irbid Governorate and the selection of the Rich Picture technique for new system identification.

Through the literature research in section 4, it was found that the Rich Picture technique can address and explain the EDMS. Rich Picture technique. It was proved that the electronic document management system is the most suitable for creating a new system because it is easy to use, and works as a powerful communication tool with all areas of the Joint Services Council of Irbid Governorate, as it was found that the best practices that were found from the alternative methods were the scanner technology for change paper from hard copy into soft copy in section 4.

The EDMS has been analyzed developing and optimizing the new systems for document management. Therefore, the proposed framework has been presented and evaluated The EDMS for Joint Services Council for Irbid Governorate includes six objectives, which were applied to a case study. The practical part of the study was done to illustrate how to apply these steps in practice.

Finally, section 1 Introduction of The Study, section 2 Related works, section 3 The Theoretical Framework of The Study, section 4 Implementation Using SWOT, section Results and Discussion, section 6 Conclusion.

The application of the research to the current system of leadership depends on the competence of the employees. The Joint Services Council of Irbid Governorate provides training opportunities and participation in meetings for staff at a high level. It is important to maintain the working mechanism in standard ways in managing the workflow within the Joint Services Council of Irbid Governorate and its affiliated regions.

References

[1] Maulana, B., Feriyansyah, F., & Sari, R. D. (2022). The Design of Web-based Thesis Management Information System to Increase the Quality and Efficiency of Guiding Process and Document Management. *INFOKUM*, 10(02), 1358-1361.

- [2] Fadhil, N. F. M. (2022). Using rich picture to understand the issues and challenges in e- learning environment: a case study of students in higher education institution. *World Journal of English Language*, 12(2), 189-189.
- [3] Guo, F., Jahren, C. T., & Turkan, Y. (2021). Electronic document management systems for the transportation construction industry. *International Journal of Construction Education and Research*, 17(1), 52-67.
- [4] Ayaz, A., & Yanartaş, M. (2020). An analysis on the unified theory of acceptance and use of technology theory (UTAUT): Acceptance of electronic document management system (EDMS). *Computers in Human Behavior Reports*, 2, 100032.
- [5] Rosa, A. T. R., Pustokhina, I. V., Lydia, E. L., Shankar, K., & Huda, M. (2019). Concept of electronic document management system (EDMS) as an efficient tool for storing document. *Journal of Critical Reviews*, 6(5), 85-90.
- [6] Nwankwo, W., & Olayinka, A. S. (2019). Implementing a risk management and X-Ray cargo scanning document management prototype. *International Journal of Scientific and Technology Research*, 8(9), 93-105.
- [7] Bell, S., Berg, T., & Morse, S. (2019). Towards an understanding of rich picture interpretation. *Systemic Practice and Action Research*, 32, 601-614.
- [8] Parviainen, A., & Loukola-Ruskeeniemi, K. (2019). Environmental impact of mineralised black shales. *Earth-Science Reviews*, 192, 65-90. Arkansas electronic cooperatives / AEC (2006) EDMS [Accessed 25 April 2009].
- [9] Zdraveski, D., Janeska, M., & Sotiroski, K. (2019). Implementation of electronic document management system (EDMS) in Macedonian companies. *Southeast European Review of Business and Economics*, 66.
- [10] Robson, W. (2015). *Strategic Management and Information Systems* uPDF eBook. Pearson Higher Ed.
- [11] Walker, D., Steinfort, P., & Maqsood, T. (2014). Stakeholder voices through Rich Picture. *International Journal of Managing Projects in Business*, 7(3), 342-361.
- [12] AbdulAzeez, A. D. (2012). *Development of a Prototype Electronic Document and Record Management System (EDRMS) for Small and Medium Building Firms*. Unpublished PhD Dissertation, Ahmadu Bello University, Zaria, Nigeria.
- [13] Sylvester, A., Tate, M., & Johnstone, D. (2007). Re-presenting the literature review: a rich picture of service quality research in information systems. *PACIS 2007 proceedings*, 113.
- [14] Smith, K. (2007). *Planning and implementing electronic records management: a practical guide*. Facet Publishing.
- [15] Avison, D. E., & Fitzgerald, G. (2003). Where now for development methodologies?. *Communications of the ACM*, 46(1), 78-82.
- [16] Björk, B. C. (2003). *Electronic document management in construction—research issue and results*.
- [17] Horan, P. (2000, November). *Using Rich Pictures in Information Systems Teaching*. In ICSTM.
- [18] Frappaolo, C. (1995). *Electronic document management system analysis report and system plan for the Environmental Restoration Program (No. ES/ER/TM--158)*. Lockheed Martin Energy Systems.

WEB SOURCES

- [1] Holly M. Lyons. (2008). *Electronic Document Management System (EDMS)* [Accessed 24 September 2008]. https://eccfp.edu.mk/files/Attachment/SERBE_No_2.pdf#page=66
- [2] Daniel Sánchez-Martínez¹, Inmaculada Marín-López², Tomás Jiménez-García³. (2008). *Electronic Document Management in the University of Murcia*. [Accessed 30 April 2009]. <https://www.eunis.org/eunis2008/papers/p45.pdf>