University of Baghdad College of Engineering



Journal of Engineering

journal homepage: www.joe.uobaghdad.edu.iq



Volume 29 Number 8 August 2023

Developing a Proposed System to Organize the Investment Opportunities in Iraq

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ABSTRACT

 ${f T}$ he Iraqi government seeks to overcome the financial crisis by investing and privatizing some projects to achieve sustainable growth. Most of the investment projects in Iraq suffer from many constraints that greatly impact the success of these projects. A survey of the opinions of a group of experts was conducted to identify the most important constraints facing the investment process in Iraq. Then the experts' answers were arranged in a closed questionnaire and distributed to the research sample for which the statistical analysis was conducted. Through it, the most important (17) factors that had the greatest impact on the failure of investment projects in Iraq were reached. One of the main constraints was the slow and routine administrative procedures. Therefore, the main objective of the research is to identify the most important constraints facing the investment process in Iraq and to develop a proposed system to organize the procedures for applying for investment opportunities, given the importance of long-term investment, the importance of the referral stage, and the selection of the competent investor who meets the criteria required for the success of the investment project. The researcher concluded that many factors impact the failure of investment projects, which must be addressed for the success of these projects, as management systems and computer technology programs greatly organize investment procedures, save time and reduce routine and slow procedures.

Keywords: Investment Projects, Construction Projects, Investment Opportunities.

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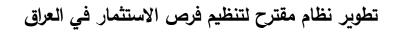
Peer review under the responsibility of University of Baghdad. https://doi.org/10.31026/i.eng.2023.08.12

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Article received: 01/01/2022

Article accepted: 19/03/2023

Article published: 01/08/2023



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الخلاصة

تسعى الحكومة العراقية إلى تجاوز الأزمة المالية من خلال استثمار وخصخصة بعض المشاريع لتحقيق النمو المستدام. تعاني معظم المشاريع الاستثمارية في العراق من معوقات كثيرة لها الاثر الكبير على نجاح هذه المشاريع ، تم إجراء مسح لآراء مجموعة من الخبراء لتحديد أهم المعوقات التي تواجه عملية الاستثمار في العراق. ثم تم ترتيب إجابات الخبراء في استبيان مغلق وتوزيعها على عينة البحث التي تم إجراء التحليل الإحصائي لها. ومن خلاله تم التوصل إلى أهم (17) عاملاً كان لها أكبر الأثر في فشل المشاريع الاستثمارية في العراق. وكان من أبرز المعوقات الإجراءات الإدارية الروتينية والبطيئة. لذلك فإن الهدف الأساسي من البحث هوتحديد اهم المعوقات التي تواجه عملية الاستثمار في العراق و تطوير نظام مقترح لتنظيم إمراءات التقدم لفرص الاستثمارية في العراق. وكان من أبرز المعوقات الإجراءات الإدارية الروتينية والبطيئة. لذلك فإن إمراءات التقدم لفرص الاستثمارية في العراق. وكان من أبرز المعوقات الإجراءات الإدارية الروتينية والبطيئة. المقدل الهدف الأساسي من البحث هوتحديد اهم المعوقات التي تواجه عملية الاستثمار في العراق و تطوير نظام مقترح لتنظيم إمراءات التقدم لفرص الاستثمار ، بالنظر إلى أهمية الاستثمار على المدى الطويل ، وأهمية مرحلة الإحالة ، واختيار المستثمر المختص. من يستوفي المعايير المطلوبة لنجاح المشروع الاستثماري. وخلصت الباحثة إلى أن هناك العديد من وبرامج تكنولوجيا الحاسوب تنظم بشكل كبير إجراءات الاستثمار وتوفر الوقت وتقلل من الإجراءات الروتينية والبطيئة .

الكلمات الرئيسية: مشاريع استثمارية ، مشروع إنشائى ، فرص استثمارية.

1. INTRODUCTION

Investment in Iraq has received significant interest from the Iraqi government due to the essential role it plays in the economic development process, and government agencies will not be able to advance the economic reality of the country unless there is a clear strategy and steps drawn to attract investors and the cooperation of all concerned for the success of investment projects (Naji et al., 2019). Investment projects are one of the most crucial factors contributing to economic growth acceleration, a successful method of creating and multiplying wealth; this will improve the situation on a personal, institutional, and even national level and is a successful method of achieving all of society's economic goals by increasing production levels that reach self-sufficiency (Almissary and Burhan, 2020). The investment process in Iraq faces a problematic bet due to the lack of experience, and it also meets significant constraints, the most important of which are administrative, financial, technical, infrastructure, and political constraints (Jaber and Burhan, 2020) The main objective of the research is to know the most important constraints facing investment projects in Iraq and affecting their success through a closed questionnaire and analyzing the results statistically. Where was reached (17) a factor that had the most significant impact distributed on five axes (administrative, financial and economic, technical, infrastructure, and constraints related to documentary credits and other constraints), then an administrative system was proposed that works to organize the procedures for applying



for investment opportunities to reduce red tape and slow procedures in government departments.

The investment project can be well-defined as the optimum set of investment activities based on sector and logical planning. It is represented by a grouping of humans, materials, and resources that lead to economic and social development (Hurjui and Hurjui, 2008). "An investment project can also be defined in another way as the transfer of foreign capital, knowledge, and advanced technical and administrative technology to generate economic, social, and administrative development that can lead to developing and reviving the host country through new companies and in participation with national capital" (Erzaij and Aljanabei, 2016). An investment project's success and efficiency are evaluated by estimating the future cash flows generated by the operations of an enterprise (whether in the public or private sector) (Frefer et al., 2018), identifying the key factors and potential risks, and using a conceptual model or framework that takes all of these factors into account, and also for its ability to position the company in a successful position on the market (Klakegg et al., 2005; Burja and Burja, 2009). Various elements are taken into consideration when analyzing the success of any investment project, such as technical factors, environmental impacts, social issues, and financial profitability is of the most significant importance as economic analysis is usually conducted through quantitative measures such as net present value, internal rate of return, profitability index, etc. The evaluation concerning technical, environmental, and social standards is often qualitative (Nowak, 2005). An investment construction project's environment comprises various factors, including market circumstances, different organizations, global hazards, the political and regulatory landscape, rivals, suppliers, and customers (Nizamova et al., **2020**). The main stakeholders' participation guarantees the investment project's success and allows the project specifications and scope to be determined at the project start-up stage. The project manager and sponsor are clear concerning the budget, expected results, project purpose, and time frame for project deliverables. Project success is also achieved through the integration of the role of all parties in the project (Al-Ageeli and Alzobaee, 2016).

This work aims to identify the most important constraints facing the investment process in Iraq and arrange them according to their impact on the project and their importance, as achieving success for investment projects requires studying and analyzing these constraints. Then a proposed system was developed to organize the procedures for applying for investment opportunities, facilitate the procedures, and increase accuracy and speed.

2. METHODOLOGY

The questionnaire is the primary source approved by the researcher in obtaining the required information, as it is considered one of the important tools in project management to get to know the opinions of a large group of specialists and those with a relationship with the research subject. An open questionnaire included personal interviews with many experts with investment experience and project management. The results of these interviews identified (47) factors causing the weakness of investment projects in Iraq distributed into five groups (legal and administrative, financial and economic, technical, documentary credits, and other obstacles). The factors were arranged in a closed questionnaire and distributed to the chosen research sample based on specialization. Fifty questionnaires were distributed. (40) were received, and eight were discarded due to



errors and incomplete information. 51 correct answers were returned in the survey, which was distributed online. Thus, the total number of participants in the survey (83). The statistical program (SPSS) analyzed the questionnaire results to calculate the relative significant index (RII) to identify the limitations that significantly affect investment projects. It was found that (17) obstacles had the most significant impact on the failure of investment projects, as shown in **Table 1**.

Table1. Statistical analysis of constraints to investment projects in Iraq.

No.	Constraints		RII	Category of Constraints
1	Routine and slow government administrative procedures		0.8470	Administrative and Legal
2	Delaying the approval of the budget Negatively affects the implementation of projects due to a lack of financial liquidity in general.	4.0843	0.8169	Administrative and Legal
3	The lack of prior coordination with some ministries and provincial councils leads to intersections in the implementation of projects	4.1687	0.8337	Administrative and Legal
4	Exceeding the plots of land allocated to investment projects and the difficulty of eviction procedures.	4.3855	0.8771	Administrative and Legal
5	Delay in land acquisition procedures for projects	4.0241	0.8049	Administrative and Legal
6	The reluctance of many specialized international companies to invest in Iraq	4.4819	0.8964	Administrative and Legal
7	Weak knowledge of the working staff about the relevant laws and instructions, especially the investment law	4.0000	0.8000	Administrative and Legal
8	Sub-sale of the investment project by investors or contracting with subcontractors.	4.0723	0.8145	Administrative and Legal
9	The lack of financial and technical efficiency of most investment companies.	4.0482	0.8096	Financial and Economic
10	Lack of development of support services such as Transportation, insurance, etc.	4.0843	0.8169	Infrastructure
11	The lack of electric power supply for the areas where investment projects are to be established requires the investor to develop new generation stations to fill the shortfall in the supply of electric power, which in turn requires additional sums.	4.1807	0.8361	Infrastructure
12	The difficulty of contracting with foreign companies specialized in their work due to the high financial cost imposed by them.	4.0361	0.8072	Technical

13	Most of the technical and economic feasibility studies for investment projects are weak and do not include all project requirements	4.0843	0.8169	Technical
14	Tribal problems, especially in remote areas.	4.0723	0.8145	Documentary credits and other
15	Most foreign companies refrain from sending their technical staff to the project sites for security reasons.	4.2651	0.8530	Documentary credits and other
16	The spread of administrative and financial corruption in most of the joints of the ministries of the state	4.6265	0.9253	Documentary credits and other
17	The political instability and change in government.	4.4940	0.8988	Documentary credits and other

3. PROPOSED MANAGEMENT SYSTEM

Through the results of the statistical analysis of the closed-ended questionnaire, it was concluded that routine and slow government procedures are among the factors that had the greatest impact on investment projects. Therefore, the researcher proposed an administrative system to organize government procedures for applying for investment opportunities and reduce routine and slow procedures due to the importance of investment in the long term and the importance of the stage Assignment in the success of the investment project.

3.1. Procedures / Guidelines for the Proposed Management System

The following procedures were adopted in building the proposed system to organize the procedures for applying to investment opportunities in the Iraqi ministries.

- 1. The Single Window Department sends the nominated investment opportunities annually to the National Investment Commission (NIC) to contribute to publishing and advertising them so that investors can view them.
- 2. The Investment Department- the Single Window Department in the concerned Ministry receives requests from companies and investors for the opportunities referred to above, based on Investment Law No. (13) Of the year 2006.
- 3. Companies and investors are given a full two weeks after the announcement to complete the requirements for investment opportunities referred to in paragraph (3.2.1).
- 4. The requirements are submitted to the Single Window Department or electronically through the Ministry's website.
- 5. The Director of the Single Window Department submits a list of applicants to the Director General to instruct the study and analysis committee to select the best according to the applicable comparison criteria.
- 6. If the request is accepted, the Director General approves the investor's request; he is informed to provide the Ministry with the requirements of the second stage referred to in paragraph (3.2.2).
- 7. The requirements are referred to in the departments below to take the necessary action as illustrated in **Fig. 1** below, each according to its specialization, inform the investor in

the event of a shortage or modification, and provide them with it within a period specified by the concerned departments.

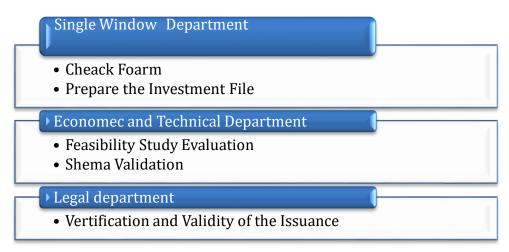


Figure 1. Departments specialized in completing procedures

- 8. After making the necessary procedures from the above sections, an evaluation form shall be submitted to the Director General for approval if the requirements of the applicable evaluation criteria are met; after that, it is submitted to the Minister for approval or rejection.
- 9. The investor shall be informed through the Inquiries Division of the Single Window Department, by website, or any other means, of the acceptance or rejection of his application.
- 10. The legal department is instructed to prepare a draft contract following the regulations and laws.
- 11. Sending the investment file and the draft contract to the National Investment Commission (NIC) to complete the procedures for obtaining the investment license, rent estimate, and payback period.
- 12. The economic department will hand over the land to the investor and follow up on the implementation procedures.

3.2 Requirements Required from the Investor

- 3.2.1. The First Stage
- 1. An application submitted by the company or the investor to apply for the announced investment opportunity includes the project's name, type, the applicant's name, exact address, e-mail, and phone number.
- 2. The financial efficiency of the company or investor includes either a letter of confirmation from the bank or a letter of guarantee from an accredited bank.
- 3. Clearance.
- 4. Technical description of the project.
- 5. Preliminary designs for the project, approved by an engineering office.
- 6. Primary work progress table.
- 7. Projects implemented by the investor or his partners inside or outside Iraq and similar and previous works carried out by the executing company.

- 8. Final accounts of the company (for the last three years).
- 9. The certificate of incorporation of the company or the branch of the foreign company in Iraq or the identification papers of the natural investor.
- 3.2.2. The Second Stage
- 1. A guarantee from the financing party from an accredited financial institution accompanies the financing plan for the project.
- 2. Detailed technical description of the project.
- 3. Feasibility study for the project.
- Architectural drawings. The procedure of the proposed system is shown in Fig. 2

4. THE PROPOSED SYSTEM SOFTWARE

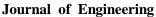
A computer program was proposed according to the flowchart **Fig. 2** for use by the investment departments and decision-makers in the Iraqi ministries, as this program provides the possibility of applying electronically to investment opportunities and knowing the result of the final decision of acceptance or rejection, as well as provide the speed of procedures, accuracy, ensuring integrity and transparency in choosing the best investor far from prejudice and fairness to all applicants. The staff of the Single Window Department, the Legal Department, and the Contracts Department will be responsible for following up and verifying the completion of the requirements and investor documents, filling in the data within the program to obtain the appropriate offer from the investor, and conforming to all criteria (administrative, technical, qualifying, etc.). The researcher considered the confidentiality of the information provided by the investor when developing this program by creating a username and password for each user with access to the data.

The program was applied to a case study (one of the investment projects in one of the Iraqi ministries) which is (Al-Alam Sports Club Recreational Complex) where this project is located in (Salah al-Din Governorate).

4.1 Specifications of the proposed program

The particular specifications of this proposed program are:

- 1. Microsoft Visual Basic (vb.net) software, version 2012, was used.
- 2. The program can withdraw project reports in (word, pdf, or Excel) format, facilitating the work of the departments participating in the projects in decision-making and avoiding repeating previous mistakes.
- 3. The database was designed by (SQL) server 2012, which facilitates saving project data and accessing it later for audit purposes.
- 4. The program can be used by employees of ministries and investors as well.
- 5. The English program language was used similarly to the research language.



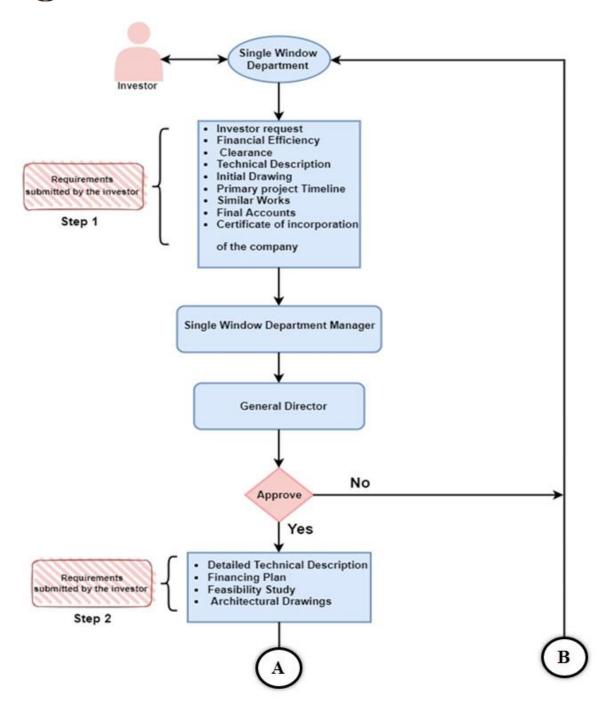


Figure 2. Structure of the proposed management system



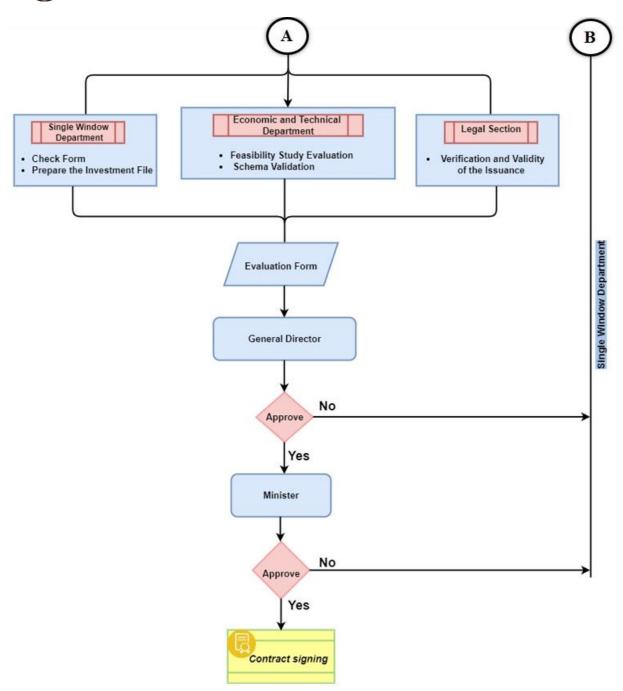


Figure 2. Continued.

4.2 Program Interfaces

The main window of the proposed program is an identification interface that will display when the user runs the program, which contains the name of the researcher and supervisor as well as the name of the research, as illustrated in **Fig. 3**.



Engineering requ	irements and procedures opportunities in the co	for achieving successful investinstruction sector	nent
By : Sara Muhami supervised by : Le	nad Salih Abd Ali c.Dr. Ibrahim Fadhil Mul	hsin	
	Start Program	End	
	Start Program	End	

Figure 3. The Main Window of the program

4.2.1 Investor

When the investor starts applying for the investment opportunity through the Ministry's website, a window will appear asking him to enter his username and password, as shown in **Fig. 2**.

invo	estor			
assword:				
*	**			
			_	
اتهاء		دخول		

Figure 4. The proposed program entry window

After entering the username and password that is created by the investor and pressing (enter), the following window will appear in **Fig. 3**, which includes four main tracks:

- 1. Section of investor information
- 2. Search project details
- 3. Employee Section
- 4. Project information





Figure 5. The Beginning of the proposed program

Only option number (1) is available to the investor, and the rest of the windows are for procedures related to the concerned Ministry (the owner of the investment project. When the investor clicks on the option (section of investor information), the following window will appear in **Fig.6**, which includes four options:

- 1. Enter new project information
- 2. Add the four other required documents
- 3. View the final project decision
- 4. Exit

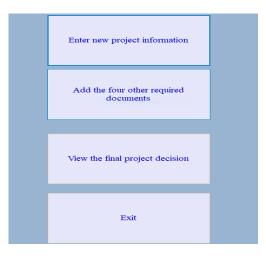


Figure 6. Section of investor information

When clicking on the first option (Enter new project information), the following window will appear, as shown in **Fig.7**. Through this window, the investor downloads the priorities required to apply for the investment opportunity, including: (Investor Request, Financial Efficiency, Clearance, Technical Description, Initial Drawings, Primary Project timeline,



Similar Work, Final Account, and Certificate of incorporation of the company). After completing the download of the requirements by the investor, the button (send information to the server) is pressed to send the requirement. After accepting the application, the investor must submit the requirements for the second stage through the option (add the four other required documents), as shown in **Fig. 8**.

B	asic Information			
	Project Name: Al-Alam	Sports Club Complex		
	Company or investor N	Jame : yanabe alyasmen		
	Submission Date: 2/	20/2021	0 -	
	Phone No. 077077			
Attached Files	Add File Uploaded	Primary Project TimeLine	Add File Uploaded	1
Finanical efficiency:	Add File Uploaded	Similar Work : Add	File-Uploaded	
Clearance: Add File-Uploaded		Final Account : Add	File Uploaded	
Technical Descriptio	n : Add File Uploade	Certificate of incorporation	a of the company : Add	File Uploaded
Initial Drawing :	Add File-Uploaded	Reset Information Files		
end			Send Informa	tion To Server

Figure 7. Enter new project information

	Enter Project name and company to Add another document Project Name: Al-Alam Sports Club Complex Company or investor Name : yanabe alyasmen open document windows	
Attached Files		
	Detailed Technical Description : Add File Uploaded	Reset Information Files
	Financing Plan : Add File Uploaded	
	Feasibility Stydy : Add File Uploaded	
	Architectural Drawings : Add File Uploaded	
Back		Send information to server

Figure 8. Add the four other required documents



After completing the entry of the requirements of the second stage, which includes (a detailed technical description, financing plan, feasibility study, and architectural drawings) by the investor, the button (send information to the server) is pressed to send the requirements. The investor can know the final decision of accepting or rejecting his application and the reason for rejection through the option (View the final project decision) as shown in the following window, **Fig.9**.

4.2.2 Decision Makers

After entering the user name and password of the manager of the single window department, a window is selected (search project details) a table appears, including (Project Name, Company or investor Name, submission Date, phone number, Final Decision, and Reason of Reject), as shown in the following window **Fig. 10**.

To know the final decision of the project	
Enter the information below Project Name: Al-Alam Sports Club Complex	
Company or investor Name : yanabe alyasmen Phone No. 077077	
View the final decision	
The final decision The decision made is Accept	
The reason, if any	
Back	

Figure 9. View the final project decision

		Projects	s sent for au	dits and conver	<u>rsion</u>	
	Project Name	Company or investor Name	Submission Date	Phone Number	FinalDecision	ReasonOfReject
•	Al-Alam Sports Club Complex	yanabe alyasmen	2/20/2021	077077		
•						

Figure 10. A table of investors applying for the project

Click on the investor's name, and then go to the window (employee section) as shown in **Fig. 5**; the following window will appear in **Fig. 11**. Which contains the basic information (the name of the project, the name of the company or investors, submission date, and phone number), as well as the document that submits by the investor, which appears by clicking on the button (show). After checking all requirements by the single window department manager, a button (Next Page) is pressed; the window below appears **Fig. 12**.

If the requirements meet the required criteria, the (Yes) option is selected and submitted to the Director General to decide whether to accept or reject.

If the requirements do not meet the required criteria, the (No) option is selected, and the investor is informed of the rejection of his application through the program and the reason for the rejection.

Suppose the Director General approves the investor's request. In that case, he will be notified to provide the concerned department with the requirements for the second stage, which appear in the window below when a button (Show) is pressed **Fig. 13**.

Basic Information	
Project Name: Al-Alam Sports Club Complex Company or investor Name : yanabe a	lyasmen
Submission Date: 2/20/2021 Phone No. 077077	
Attached Files	
Investor Request : Show	
Finanical efficiency: Show	Post New A-Aut Stats Ou
Clearance: Show	Pari Balange - Goord T
Technical Description : Show	S
Initial Drawing : Show	
Primary Project TimeLine Show	
Similar Work : Show	<u>Composition</u> Eng. Straum H Hann
Final Account : Show	Diphones constant Provide State A
Certificate of incorporation of the company : Show	
Back	Next Page

Figure 11. The first stage requirements

Check	c if all requirements are completed
Single Window Department	Yes No
the reason of refuse	
General Director	Yes No
the reason of refuse	
Back	Next Page

Figure 12. Check if all requirements are complete 184

	Enter Project name and company to Add another document Project Name: Al-Alam Sports Club Complex Company or investor Name : yanabe alyasmen open document windows	
Attached Files		
	Detailed Technical Description : Add File Uploaded	Reset Information Files
	Financing Plan : Add File Uploaded	
	Feasibility Stydy : Add File Uploaded	
	Architectural Drawings : Add File Uploaded	
Back		Send information to server

Figure 13. The second stage requirements

After checking the requirements, they are sent to (The single Window Department, Economic and Technical Department, and Legal Section) to take the necessary action, each according to their specialization, after pressing a button (Next Page) as shown in the window below **Fig. 14**.

	Department		
		☑ Check Form	Show All Documents
		Prepare the investanent files	
Economic and ⁻	Technical Departm	ent	
Feasibility stud	dy Evaluation		
	Committee Opinion	Matching	
		☑ Schema Validation	
egal Section			
		☑ Vertification and validity of the iss	uance
Back			Next

Figure 14. Check form

After the necessary procedure by the above departments, a button (Next) is pressed. As shown in **Fig.15**, a new window appears as a form for evaluating the company or the investor by General Director according to the required criteria.

Volume 2	29	Number 8	August 2023	Journal of	Engineering
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Back				Next	

Figure15. Evaluation Form

After pressing a button (next), the evaluation form will be sent to the Minister to make the appropriate decision by approving or rejecting the investment opportunity, indicating the reason for the rejection, as shown in **Fig. 16**.

Final D	ecision		
Show All Documents		Accept	Rejection
_			
			End
		Final Decision Show All Documents	

Figure16. The Final Result

5. CONCLUSIONS

The following point was concluded through the literature reviews of previous studies, the questionnaire that was prepared, and the software program.

1. Most investment projects in the Iraqi public sector suffer from many problems and constraints that negatively affect the success of these projects.



- 2. The research showed that (17) causative factors greatly impacted the failure of investment projects in Iraq. Calculating (rii) for all constraints showed that the administrative and legal constraints were at the first level.
- 3. The researcher concluded that computer and software technologies significantly facilitate investment procedures, save time, and make work more efficient and accurate.
- 4. This proposed system will help speed up slow routine procedures, shorten time and effort, and provide transparency and integrity in choosing the investor.

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