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Shuaib Mohammed Sharif
Al-Qalam University College

THE EFFECT OF INTELLIGENT DESIGN SYSTEM STRATEGY ON THE SERVICE MANAGEMENT SYSTEM DEVELOPMENT: A CASE STUDY IN IRAQI TELECOM COMPANIES

ABSTRACT
The customers' various requirements prompted organizations to change the process of designing their products and services from standard design to diversified one by using digital technologies. In this concern, the main objective of the study is to reveal the effect of the intelligent design system strategy in enhancing service management system development through a field study in Iraqi telecom companies. After reviewing the reality of the companies, the data was collected by means of a questionnaire and analyzed by relying on the (SPSS) program. On the basis of the results of the analysis, the study reached many conclusions and suggestions that are commensurate with its nature.
Keywords: Intelligent Design Strategy, Management Service Systems.

INTRODUCTION
Using digital technologies and algorithms is one of the key methods that organizations adopt in intelligent designing a product (good or service), which enhances the quality of its services provided to the customer. Thus, it achieves a large market share as a result of providing services that meet the aspirations of different customers, as well as the superiority that the organization will achieve at the expense of competitors in terms of speed, quantity and cost. From this point of view, the current study is divided into four axes: the first axis includes the methodology of the study. The second includes the theoretical aspect, while the third deals with the field aspect, and the fourth concerns conclusions and suggestions.

THE FIRST AXIS: THE METHODOLOGY OF THE STUDY

First: Research Problem
Most business organizations encounter the problem of changing the design of their products and services, due to poor knowledge and lack of modern technology, or lack of customer information, which negatively affects the organization service systems. To address this problem, organizations have turned towards intelligent technologies because of their active role in designing the product in an intelligent way that responds to the various customers' requirements. Iraqi telecommunications companies suffer from this problem of (lack of possession of advanced technologies, limited knowledge, and weak feedback). To address this problem, the following questions were asked: (Do companies have intelligent design techniques? What are the elements of service systems that companies own? How does the intelligent design system affect service systems?)

Second: Research Importance
The importance of the study lies in the benefits it brings to the companies under study:
1- Helping companies to learn about intelligent design techniques and their contribution to improving the quality of their products and services.
2- Making the company service systems provide services that meet the customer's ambition.
3- Gaining a larger market share at the expense of competitors through the application of intelligent design technologies in the design of its services.

Third: Research Objective

The main objective of the study is to reveal the impact of the intelligent design system strategy in enhancing service management system development through a field study in Iraqi telecommunications companies, and from this main objective we define the following objectives:

1- Diagnosing the problems of applying the intelligent design system strategy in the study sample companies.

2- Determining the obstacles faced by companies when implementing service systems.

3- Addressing the problems of intelligent design and reducing the obstacles that affect the service systems in companies based on the theoretical and practical aspects of the study.

Fourth: Research Hypothesis

The study starts from one hypothesis: there is an effective relationship for the intelligent design system in the service systems.

Fifth: Statistical Scale: The study adopted the following statistical methods (Duai, 2010, 6):

- Frequencies, percentages, mean and standard deviation
- The percentage of conformity through the equation (conformity percentage = arithmetic mean / highest degree of measurement).
- Gap ratio (gap = 1- matching ratio).

THE SECOND AXIS: THE THEORETICAL SIDE

First: The Intelligent Design System Strategy

1- The concept of the intelligent design system strategy: (Zhang et al., 2017) sees the completion of the product design process using advanced digital technologies such as geometric modeling, kinetic simulation, and dynamics. Human-computer interaction achieves a design that meets individual and diverse customer requirements as quickly as possible and at the lowest possible cost. (LI et al., 2020) shows that the intelligent design system is one of the digital technologies used in advanced design and manufacturing chains that achieves the best production advantages, quality, low production cost and short time for marketing and development. (Tsang et al., 2021) indicates that the use of technology by humans to design a product with a high degree of quality, safety, ease of manufacture, use and maintenance achieves customer satisfaction and superiority over competitors.

2- Factors affecting intelligent design system strategy: Intelligent design is affected by many factors, the most important of which are (Wang et al., 2019):

- Unclear design requirements resulting in product design difficulty and reduced efficiency.
- Changing design goals and the weakness of the design system.
- The complexity of users' requirements when they cannot describe the requirements themselves makes it difficult for designers to understand the basic needs of users. Design failures often result from deviations in user orientation.

3- Functions of the intelligent design system strategy: There are many functions associated with intelligent design system strategy (Jamshidi et al., 2020):

- Product design using CAD computer system.
- Extracting engineering and design features.
- Converting product information into facts for inference purposes.
- Inference and suggestion of design rate and materials for production.
- Automatically correct design flaws and enter them into the model.

4- The mechanism of work of the intelligent design system strategy: The work of the intelligent design system depends on several steps (Wang et al., 2019):

- A knowledge base that contains coded expertise from one or more experts in the field.
- The inference provides strategies for manipulating the encoded knowledge in order to arrive at the ultimate solutions.
- Providing a user interface for interaction between the system and the user.
- Providing links to a traditional database for importing data and using it for inference.

5- Elements of the intelligent design system strategy: The intelligent design system consists of several elements:

- Expert system or knowledge base: It is one of the most useful elements of the intelligent design system, as it embodies the expert information available in the virtual design and reflects it on the design of the product or service in reality. This role is performed by the designer engineers, technical specialist or external consultant, using many high-level intelligent functions such as intuition, creativity, correlation, induction, recognition, and inference. It is to analyze these functions accurately in order to reach the point at which an algorithm was obtained to achieve these functions, as knowledge helps to address the problem of constructing the design to be able to fully perform its functional tasks. When the availability of many sources of knowledge makes conflicting design solutions, expert systems wrappers must be used along with knowledge bases (Zhang et al., 2017), to generate logical inferences that give the design space acceptable solutions. This is called a Knowledge-Based Approach (KBS) which usually takes the form of an intelligent computer program. Knowledge and inference procedures are used to solve complex decision problems, and knowledge of a knowledge-based system consists of facts and inference.
Facts constitute a set of widely shared, publicly available, and generally agreed-upon information by experts in a field. As for "inference" it is mostly private information that characterizes decision-making at the expert level in the field (LI et al., 2020).
- Information control: The effectiveness of the intelligent design system depends on the quality of the information used in the design, as the design status is published in the blackboard system database. When the degree of information required to implement the unit is present, the unit is activated, and the units can be analysis units, design performance data or procedures for evaluating or checking whether the design meets requirements and constraints such as manufacturing, cost, environmental impact, etc. Within this framework, the design process is controlled by engineers or is done by an intelligent design system, whereby the design engineer uses all the functions that it provides system for design development. In this case the intelligent design system interacts with the human designer as the ultimate arbiter of the state of the design. Then the design checks are performed automatically and the user is informed of the results and based on these results the system is allowed to modify the design state to reach the required performance level (LI et al., 2020).
- Designer's Intentions: Recognizing the intentions of an expert designer during the design process is a very difficult process, and the difficulty is that the design intent is not a clearly defined quantity and is difficult to measure. It is possible to identify the designer's intention by recording the reasons and circumstances that led him to change the original design. The designer's intention can be identified when using the intelligent design system that facilitates this process, through which the deviation from the proposed design is recorded with some information or explanations provided for it. This information is useful in developing new alternatives if a similar situation arises in the future (Jamshidi et al., 2020). Recording the design goal in the first place requires attention towards developing all necessary design features and functions present in the product using the experimental method. The error is in the following steps: (1) building a temporary model (2) evaluating the model and comparing the results to the design requirements (3) modifying the model and then returning to step 2 to see if the model fails to meet the requirements. If not, the process is terminated. Therefore, the intelligent design system supports engineering information to represent the product shape, features, property behaviors, and product functions, depending on two types of data, one for dealing with a large amount of formal data and the other for processing a small amount of very complex information while giving enough flexibility to adapt to the dynamic environment (Roy et al., 2014).
- Design model: In order to obtain the required integration between the design functions, a reference model must be chosen on which the design support tools are based, and the model should be tested on the computer in order to evaluate the design automatically. The CAD system is an important factor when doing intelligent design which consists of three main components: the first is the knowledge base that contains design guidelines and material selection information, and the second is the feature extractor which extracts the features of the designed product and then recognizes them using the developed algorithms. The third successfully extracts and manages product design information, and these components are developed for this work using Microsoft NET Technologies as a Relational

Database Management System (RDBMS) in order to arrive at an appropriate design (Zhang et al., 2017).

- Design testing: For design testing, the model designed by the product design system is called to analyze the current state of the design, point out problem areas and indicatepossible improvements, and this paragraph is done before major decisions about product and process characteristics (Jamshidi et al., 2020).

Second: Service Management System Development

1- The concept of service systems: It is an integrated combination of product and service systems that allow the creation of value for the customer when used (Akbar & Hoffmann, 2019); (Haber & Fargnoli, 2017) see that these systems use the innovation strategy to be able to provide services that meet specific customer's requirements. (Totzek, 2020) indicates that it is a system that engages in the implementation of its functions, workers and machines, relying on information, technology, and other resources to produce products and services for internal or external customers. (Fonsecaa & Pintob, 2014) show that it is a complex socio- technical system that focuses on interoperability between people, technology and other resources in order to provide excellent customer service.

2- Parts of service systems: Service systems are based on three parts:

a- Science: related to knowledge of service systems and how to understand their evolution. Organizations must recognize how services are performed and how services change over time. The method of understanding and analyzing service systems accurately will achieve a distinct service from others, as well as achieve knowledge, as the density of knowledge is increasingly being part of the systems and value of modern service. Almost all service industries show a growth in the density of knowledge, whether through skilled labor or an increase The use of advanced technology, in addition to that, the roles of employees, technology, and information shared, as well as the role of customer input in service production processes must be understood, described and defined (Fonsecaa & Pintob, 2014).

b- Management: It is related to investment management to improve service systems and understand service system improvements, because it will enable management to invest successfully in this important sector, and there are three steps adopted by the manager in evaluating the return on investments aimed at improving service systems (Totzek, 2020):

- Efficiency (plans) getting things done the right way.
- Effectiveness (objectives) getting the right things done.
- Sustainability (relationships) Finding the right relationships with other service systems.

It also requires management to compare its service systems with each other according to the dimensions of efficiency, effectiveness and sustainability using its own internal information, or compare its current status with previous cases and identify historical trends in key performance indicators to enhance service performance from year to year. The service systems can also be compared using benchmarking with the systems of similar organizations (Qi et al., 2020).

c- Engineering: related to the creation of new technologies that improve and expand the scope of service systems under various circumstances, as organizations improve the service system because electronic commerce has changed the business landscape that enjoys economies of scale. Organizations use customer information to provide standard customer service regardless of location. This is done by introducing innovative technologies to provide the service new and different from others in the market, and this responsibility lies with the design and operations engineers in cooperation with the marketing department. Engineersdevelop current technologies to suit the design idea and customer requirements, and in the event that engineers are unable to do so, they must go towards purchasing advanced technologies from a third party to ensure the provision of services with the required specifications. In addition, the organization must have an engineering team to provide maintenance service to the organization and its customers alike (Haber & Fargnoli, 2017).

Third: The theoretical relationship between intelligent design and service systems: the intense competition in the market has prompted business organizations to think about abandoning traditional design methods and resorting to intelligent design methods in designing their products and services and making those products attract the customer's attention and push him towards buying and using

them, and this is what enables the organization to Easily access the market and dominate it before competitors. The more the organization increases its activities related to intelligent design, the more impact this will have on enhancing its products and services systems, as service systems need an intelligent design that enables them to be within acceptable quality standards and meet customer needs. In light of this, we have indicated that there is a strong theoretical relationship between the intelligent design and service systems, and on this basis we propose the following scheme that illustrates that relationship.

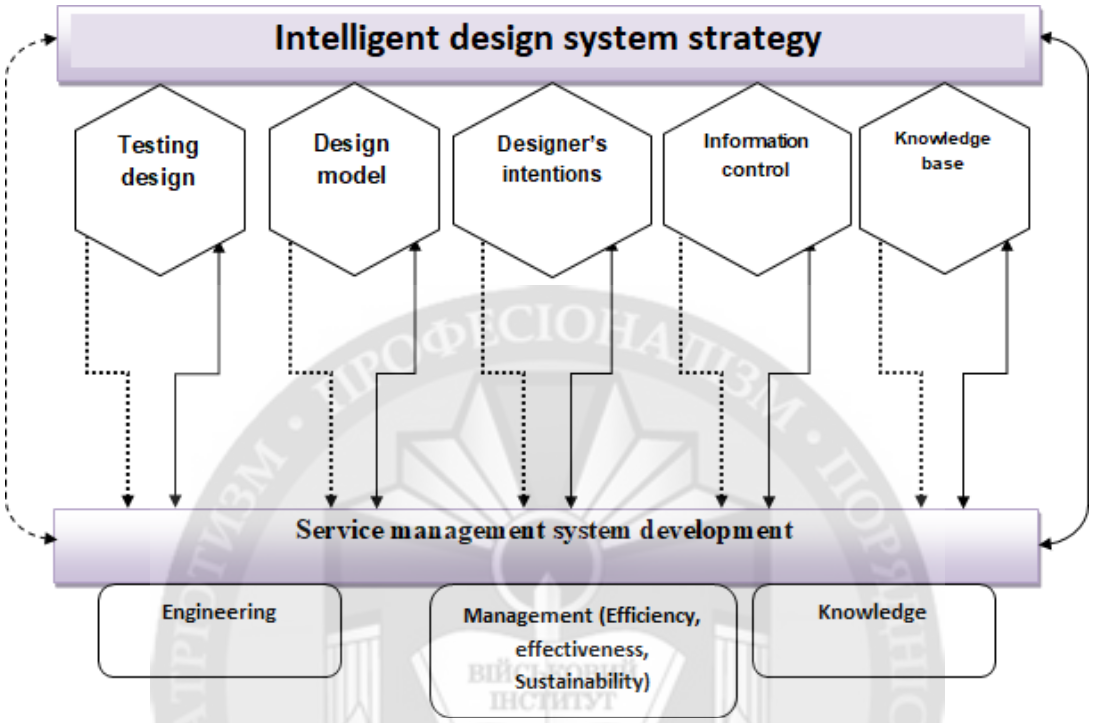

Fig 1 Intelligent Design And Service Systems

THE THIRD AXIS: THE FIELD SIDE

First: About the Iraqi telecommunications companies (study sample): Communication and postal services in Iraq were available at a very early period, as the Internet was available through the centers, but its use is very limited due to the restriction of the ruling regime on the use of the Internet, as well as the availability of wireless communications, which were allowed to be used only in a narrow range only such as Thuraya satellite phones. Since 2003, the Internet and wireless communications have entered Iraq and become accessible to everyone. There are now many Internet service providers via satellite, and the number of Internet users in Iraq is increasing significantly. The number of landline subscribers in Iraq is about one and a half million subscribers, while mobile phone users are about 14 million users. The most important telecommunications companies in Iraq are (Asiacell, Zain, Korek & Fanous et al.,), but in our study we will focus on Asiacell because it is The largest telecommunications company in Iraq, where Asiacell Mobile Communications Company was established in 1999 in northern Iraq, to be the first Iraqi cellular telecommunications company in Iraq. In 2012, the French marketing research company Altai announced that Asiacell was the number one brand in Iraq not only in the field of mobile communications, but in all sectors, which reflects the strong presence of the Asiacell brand. It is considered the main provider of high-quality mobile telecommunications services in Iraq and has more than 12 million subscribers. It is the first network in Iraq as it is the first mobile telecommunications service provider in Iraq and has achieved coverage of all its parts. The company provided its services in all eighteen Iraqi governorates, including the capital, Baghdad, and all major Iraqi cities. Asiacell network covers 99.09% of the Iraqi population, making its coverage the widest among mobile operators in Iraq

Second: Description and analysis of the results of the dimensions of intelligent design system strategy: It includes the following:

1- Expert system (knowledge base): the results contained in Table (1) indicate that the answers of the respondents on this dimension and its variables extending from (X1 - X3) tend towards agreement with a modest percentage (42.6%) and an arithmetic mean (1.93) and a standard deviation (0.79), while the percentage of neutral answers was (29.3%), while the percentage of disagreement was (28%), and although the measure of agreement got the largest percentage, there is a gap in the implementation of the experts system estimated at (36%), which means that The company's ability to meet the requirements of the experts' system is (64%), and this percentage is small and needs to be strengthened by the company.

2- Control of information: The results presented in Table (1) show that the answers of the respondents about this dimension and its variables (X4 - X6) tend towards agreement at a rate of (62%) and with arithmetic mean (2.38) and a standard deviation (0.75). The percentage of neutral answers (14.6%), while the percentage of disagreement was (23.3%). The measure of agreement obtains the largest percentage, but there is a gap in implementation after controlling information estimated at (21%), which means that the company's ability to match the requirements of information control by (79%) and this percentage is good and needs to make more efforts before The company has access to accurate information that can be easily controlled.

3- The designer's intentions: the results in Table (1) indicate that the respondents' answers about this dimension and its variables (X7 - X9) tend towards agreement with a percentage of (50.6%), an arithmetic mean of (2.26) and a standard deviation of (0.79), while the percentage formed Neutral answers (25.3%), while the percentage of disagreement (24%). The measure of agreement obtained the largest percentage, and this does not indicate that there is no gap in the implementation of the designer's intentions in the company, as the percentage of the gap is estimated at (25%), which means that the company knows the intentions of the designer in advance through a percentage (75%). This percentage is acceptable and requires the company management strengthened it to know the intentions of the designer in all.

4- Design model: The results in Table (1) show that the answers of the respondents about this dimension and its variables (X10 - X12) tend towards agreement at a rate of (55.3%) and with an arithmetic mean (2.24) and a standard deviation (0.83), as the neutral answers formed (13.3%), while the percentage of disagreement (31.3%). Since the measure of agreement got the largest percentage, but there is a gap in the implementation of the design model of (25%), which indicates that the company has the ability to match the requirements of the design model by (75%). This percentage requires scaling weaknesses in order to reach to a suitable design model.

5- Design test: The results presented in Table (1) show that the answers of the respondents about this dimension and its variables (X13 - X15) took the direction of agreement (42%), mean (1.87) and standard deviation (0.80), while the percentage of answers formed Neutral (28.6%), and the percentage of disagreement (29.3%). Although the measure of agreement obtained the largest percentage of the respondents' answers, there is a gap in the implementation of the design test estimated at (38%), which means that the company's ability to meet the requirements of the design test by (62%). This percentage pushes the company's management to continuously search for Reasons for poor testing of the initial design model.

Table1

FREQUENCIES, PERCENTAGES, MEANS, STANDARD DEVIATIONS, MATCHIN GRATIO AND GAP FOR INTELLIGENT DESIGN STRATEGY DIMENSIONS

No	**Variants**	**Response scale**			**Arithmetic mean**	**standard deviation**	**Match ratio**	**Gap**
	Intelligentdesign systemstrategy dimensions	**Agree %**	**Neutral %**	**Disagree %**				
	Expert systemor knowledgebase							
1	The product orservice in ourcompany isdesigned basedon the ideas ofcreative workers	50	26	24	2.26	0.82	0.75	0.25
2	Our companyuses intelligentfunctions suchasintuitionandcreativity tocomeup	22	38	40	1.18	0.77	0.39	0.61
	with the right design							
3	Our company relies on knowledge when solving the problem of installing the design to be able to perform its functional tasks	56	24	20	2.36	0.8	0.78	0.22
	the average	42.6	29.3	28	1.93	0.79	0.64	0.36
	Information control							
4	Our company has a design database and publishes it using the Blackboard system	56	16	28	2.28	0.88	0.76	0.24

5	Analyze design data to verify that the design meets requirements for manufacturing, cost, and environmental impact	40	24	36	2.04	0.87	0.68	0.32
6	The intelligent design system interacts with the human designer for final judgment on the state of the design	90	4	6	2.84	0.5	0.94	0.06
	the average	62	14.6	23.3	2.38	0.75	0.79	0.21
	Designer's intentions							
7	The designer's intent can be identified by recording the reasons that lead him to change the current design	32	58	10	2.22	0.61	0.74	0.26
8	The designer develops new alternatives to face any situation in the future	50	10	40	2.1	0.95	0.7	0.3
9	Supports intelligent design system designed with information to represent product form and function	70	8	22	2.48	0.83	0.83	0.17
	the average	50.6	25.3	24	2.26	0.79	0.75	0.25
	Design model							

10	Our company has a reference design model to base on when preparing a new design	74	8	18	2.56	0.78	0.85	0.15
11	When our company designs the product or service, it takes into account the quality factor in it	26	24	50	1.76	0.84	0.59	0.41
12	After the design is completed, our company creates a prototype and tests it on the computer in order to evaluate the design automatically	66	8	26	2.4	0.88	0.8	0.2
	the average	55.3	13.3	31.3	2.24	0.83	0.75	0.25
	Design test							
13	The model that is designed to test and detect problem areas is called in	40	18	42	2.02	0.91	0.67	0.33
14	Address problems in the design to be perfect	66	10	24	1.58	0.85	0.53	0.47
15	Introducing the new model to the market	20	58	22	2.02	0.65	0.67	0.33
	the average	42	28.6	29.3	1.87	0.8	0.62	0.38

Third: Description and analysis of the results of the service management system development: They include:

1- Knowledge or knowledge: The results shown in Table (2) indicate that the answers of the respondents about this dimension and its variables (X16 - X18) tend towards agreement at a rate of (58%) and with an arithmetic mean (2.32) and a standard deviation (0.84), while it formed The percentage of neutral answers (16.6%), while the percentage of disagreement was (25.3%). Although the measure of agreement obtained the largest percentage, there is a gap in the implementation of the dimension of knowledge estimated at (23%), which means that the company's ability to match the requirements of the design model is (77%), and this percentage requires strengthening by the company.

2- Administration: Table (2) shows the results of the answers of the respondents on this dimension and its variables (X21 - X19), where these answers were directed towards agreement with a percentage (59.3%), arithmetic mean (2.60) and a standard deviation (0.77), while the percentage of answers formed Neutral (18.6%), and the percentage of disagreement (22%). Since the measure of agreement obtained the largest proportion of the answers, but there is a gap in the implementation after management, which was (47%), indicating that the company has the ability to implement the requirements of the design model, which is indicated by the conformity, which is (53%). This percentage is weak and needs the company have taken good administrative measures that enable it to reach a high quality service system.

3- Engineering: The results in Table (2) refer to the respondents' answers about this dimension and its variables (X24 - X22), which tended towards limited agreement at a rate of (36.6%), arithmetic mean (1.96) and standard deviation (0.82), while the percentage of answers formed Neutral (28%), and the percentage of disagreement (35.3%). Although the measure of agreement obtained the largest percentage, there is a gap in engineering implementation estimated at (35%), which means that the company has the ability to match the requirements of the design model by (65%). This percentage requires strong support before the company by providing all requirements service engineering.

Table2

FREQUENCIES, PERCENTAGES, MEANS, STANDARD DEVIATIONS, CONFORMITY RATIO AND GAP FOR SERVICEMAN AGEMENT SYSTEM DEVELOPMENT DIMENSIONS

No	Variants	Response scale			Arithmetic mean	standard deviation	Match ratio	Gap
	Dimensions ofservicesystems	agree %	Neutral%	Disagree %				
	Knowledge							
16	Our companyhassufficient knowledge ofservicesystems	68	10	22	2.46	0.83	0.82	0.18
	and how to perform services							
17	The intensity of knowledge that our company possesses enables it to achieve value	40	32	28	2.12	0.82	0.71	0.29

	for the customer							
18	Knowledge of service systems helps our company's management understand the roles of employees, and technology, in the service production processes	66	8	26	2.4	0.88	0.8	0.2
	the average	58	16.6	25.3	2.32	0.84	0.77	0.23
	Administration							
19	Our company invests in service systems to achieve a return on targeted investments	82	8	10	2.72	0.64	0.91	0.09
20	Our company's management makes plans with efficiency by doing the work in the right way	38	34	28	2.1	0.81	0.7	0.3
21	The administration compares service systems with each other according to the dimensions of efficiency, effectiveness and sustainability	58	14	28	2,30	0.88	0.77	0.23

	the average	59.3	18.6	22	2.6	0.77	0.53	0.47
	Engineering							
22	Our engineers innovate new technologies that improve service systems under any conditions	30	14	56	1.74	0.89	0.58	0.42
23	Where engineers develop current technologies in cooperation with the production and marketing departments so that the design idea is suitable for customer requirements	46	30	24	2.22	0.81	0.74	0.26
24	In the event that engineers are unable to develop service systems, our company uses a third party to ensure the provision of services with the required specifications	34	40	26	1.92	0.77	0.64	0.36
	the average	36.6	28	35.3	1.96	0.82	0.65	0.35

Fourth: The general indicator of the study variables: The results of Table (3) indicate that all dimensions of the intelligent design achieved a percentage of agreement (50.5%), while the percentage of neutral answers (22.2%), while the answers of disagreement got a percentage of

(27.1%) at arithmetic mean (2.13) and a standard deviation (0.792). The percentage of matching answers was (71%), which means, that the percentage of the gap in the answers was (29%). This result indicates that the company applies the dimensions of intelligent design by (50.5%), and this percentage is limited and needs to be strengthened by the company's management. Table (3) also shows the results of all dimensions of service systems that achieved a percentage of agreement (51.3%), as for the percentage of neutral answers (21%), while the answers of disagreement got a percentage of (27.5%) at an arithmetic mean (2.2) and a standard, deviation (0.81). The matching of the answers was (65%), which means that the, percentage of the gap in the answers was (35%). This result indicates that the company has implemented service systems in its activities at a rate of (51.3%). This percentage is limited and needs to be strengthened by the company management.

Table3

THE GENERAL INDICATOR OF THE RESULTS OF THE STUDY VARIABLES

No	**Variants**	**responsescale**			**Arithmetic mean**	**standard deviation**	**Match ratio**	**Gap**
	The generalindicatorof the studyvariables	**agree %**	**Neutral %**	**Disagree %**				
	Intelligent designdimensions							
1	Expert systemorknowledge base	42.6	29.3	28	1.93	0.79	0.64	0.36
2	information control	62	14.6	23.3	2.38	0.75	0.79	0.21
3	designer's intentions	50.6	25.3	24	2.26	0.79	0.75	0.25
4	designmodel	55.3	13.3	31.3	2.24	0.83	0.75	0.25
5	designtest	42	28.6	29.3	1.87	0.8	0.62	0.38
	general indicator	50.5	22.2	27.1	2.136	0.792	0.71	0.29
	Dimensions ofservicesystems							
1	Scienceand knowledge	58	16.6	25.3	2.32	0.84	0.77	0.23
2	Administration	59.3	18.6	22	2.6	0.77	0.53	0.47
3	Engineering	36.6	28	35.3	1.96	0.82	0.65	0.35
	general indicator	51.3	21	27.5	2.2	0.81	0.65	0.35

Fifth: The effect of the intelligent design system on service systems: The results of Table (4) indicate the existence of a statistically significant relationship for the intelligent design system in service systems (in general), in terms of the value (R2) of (70%), which is a significant value according to the test, the estimated calculated F (14.3) is greater than its tabulated value. This means that 70% of the change in the dependent variable (service systems) is the result of independent variables. The validity of the model was also proven by following the coefficients (B) and T-test with a value (8.961) which is greater than its tabular value, which means that if the value of the intelligent design system increases by one unit, this leads to an increase in the value of the dependent variable (service systems)

by (51%) with the rest of the variables being proven for other years, thus accepting the hypothesis of the study.

Table4

THE EFFECT OF THE INTELLIGENT DESIGN SYSTEM ON SERVICE SYSTEMS

Variables	servicemanagementsystemdevelopment					
intelligentdesign	R^2	F	T	B_0	B_1	R
	0.70	14.3	8.961	0.38	0.51	0.836

FOURTH AXIS: CONCLUSION AND SUGGESTIONS

First: Conclusion: The study reached several conclusions, the most important of which are:

1- The results of the study indicate that all dimensions of intelligent design achieved a percentage of agreement among the respondents in the company, and this agreement stipulated that there is a gap in the implementation of the requirements of intelligent design, and this gap has a negative impact on the quality of intelligent design.

2- The study showed that all dimensions of service systems obtained a modest agreement between the answers, as this indicated that there is a gap in the application of the dimensions of service systems in the company, and this negatively affects the quality of service provided to customers.

3- The study revealed that there is a correlation and impact between the intelligent design system and the service systems, which led to the acceptance of the study hypothesis.

Second: Suggestion: In light of the conclusions, we suggest the following:

1- The need for the company to pay attention to the intelligent design system by investing human and engineering efforts as well as using modern technologies in order to reach an intelligent design that fits the company's technical ability and suits the needs of customers.

2- Developing the company's current service system to be a high quality system by applying service quality standards to all company operations.

3- Allocating funds within the company's budget, and the aim is to improve intelligent design activities in a way that contributes to supporting the company's service systems and thus is effectively reflected on customer service.

4- Training working individuals to develop their design skills so that they can design intelligent products and services that the company will excel over competitors.

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Шуайб Мохаммед Шаріф

ВПЛИВ СТРАТЕГІЇ СИСТЕМИ ІНТЕЛЕКТУАЛЬНОГО ДИЗАЙНУ НА РОЗВИТОК СИСТЕМИ УПРАВЛІННЯ ПОСЛУГАМИ: ПРИКЛАД ТЕЛЕКОМУНІКАЦІЙНИХ КОМПАНІЙ ІРАКУ

Анотація
Різноманітні вимоги клієнтів спонукали організації змінити процес розробки своїх продуктів і послуг від стандартного дизайну до диверсифікованого за допомогою цифрових технологій. У зв'язку з цим головною метою дослідження є виявлення впливу стратегії інтелектуальної системи проектування на покращення розвитку системи управління послугами за допомогою польового дослідження в іракських телекомунікаційних компаніях. Після перегляду реальних даних компаній дані були зібрані за допомогою анкети та проаналізовані за допомогою програми. На основі результатів аналізу в дослідженні зроблено багато висновків і пропозицій, які відповідають його природі.
Ключові слова: стратегія інтелектуального проектування, системи управління сервісом.