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# **Contribution of digitization in improving the quality of educational service, case study of “Faculty of Economics, Commercial & Management Sciences, University of Blida 2, Algeria”**

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**Abstract**--This study aimed to determine the extent to which digitization contributes to improving the quality of educational service in the higher education sector. The questionnaire was used as the main tool for this research. The sample included 250 students. The responses of the sample individuals were analyzed to see the impact relationship between the use of digitization and the improvement of the quality of educational service in its dimensions (tangible, reliable, responsive and empathetic). The most important findings are: there is a correlation and impact between the use of digitization and the quality of the educational service at the university in question.

**Keywords**--digitization, educational service in higher education sector, quality of higher education.

## **Introduction**

In view of the rapid technological development of the world, It has resulted in the use of modern ICTs, which are an important and essential element of our daily lives (Egzon Selimi, 2023, p 85). Digital transformation is the outcome of the technological revolution in the field of information and communication, encompassing most sectors and organizations becoming dependent on digitization in different trade, transactions and activities (Ostojic & al, 2024, p 84).The effectiveness of public institutions depends on the governance and quality of services provided that contribute to the social improvement of individuals and the achievement of well-being (Dashdelger, G, & al, 2024, p. 440).

Public organizations seek to improve their services in order to reach quality, excellence and satisfy the beneficiary audience. The higher education sector is one of the vital sectors directly related to economic and social development, contributing to the education and formation of students, and granting them university degrees to help them find jobs. Therefore, the major challenge facing the higher education sector is how to keep pace with technological advances in ICTs and use digitization as well as how to develop the education system and improve the quality of education services provided.

## **Study Problems**

Based on the above, the main question can be asked: How does digitization improve the quality of educational service in the higher education sector?

### **Sub-Questions**

- What is the theoretical framework for digitization?
- What is the theoretical framework for the quality of higher education?
- How does digitization affect the quality of educational service in university institutions?

## **Study Hypothesis**

To study the subject, we have relied on the following hypotheses:

### **Main Hypothesis**

There is a statistically significant impact relationship between digitization and the quality of educational service in higher education at the Faculty of Economics, Commercial and Management Sciences, Blida 2 University, Algeria, at 0.05%.

### **Secondary Hypotheses**

#### **First Secondary Hypothesis**

There is a statistically significant impact relationship between digitization and after the new curriculum and its existence for the quality of higher education in the Faculty of Economics, Commercial and Management Sciences, Blida 2 University, Algeria, at 0.05%.

#### **Secondary Hypothesis II**

A statistically significant impact relationship exists between digitization and after efficient teaching frameworks for the quality of higher education at the Faculty of

Economics, Commercial and Management Sciences, Blida 2 University, Algeria, at 0.05%.

### **Third Secondary Hypothesis**

There is a statistically significant impact relationship between digitization and after quality practical resources for the quality of higher education at the Faculty of Economics, Commercial Sciences and Management Sciences, Blida 2 University, Algeria, at 0.05%.

### **The Importance of Research**

The importance of research stems from the topic of digitization and its role in improving public services. This importance can be illustrated through the following points:

- ✓ Topic novelty
- ✓ Expanding the use of digitization and electronic management in many public sectors and institutions
- ✓ The importance attached by Algeria's highest authorities to improving the quality of public services and mainstreaming digitization in all sectors, including higher education.
- ✓ The Ministry of Higher Education and Scientific Research has adopted the digitization system in university institutions in order to facilitate and streamline the procedures for obtaining different services and developing the educational service in the higher education sector.

### **Research Objectives**

The main objectives of this research are:

1. To know the theoretical and conceptual framework of digitization and the quality of higher education.
2. To Know the relationship between the use of digitization in the higher education sector and its impact on the quality of the educational service provided.
3. To Know the impact of the use of digitization in the Faculty of Economics, Commercial and Management Sciences, Blida 2 University Algeria, at 0.05% on the quality of educational service provided from the student's point of view.

### **Previous Studies**

1-Iman Najmuddin Abdullah, Warbi, Adnan Mohammed Al-Jabqji. (2024). Improving the quality of educational services under digital transformation strategies is a survey of a sample of teachers at Mosul University. Muthanna Journal of Administrative and Economic Sciences. Vol. 14. Number 1 p. 43-54.

The problem of this study: What is the impact relationship between improving the quality of educational services and the research organization's digital transformation strategy?

The main objectives of the study: to determine the level of availability of educational service quality elements at Mosul University and the nature of the

relationship between improving the quality of educational services and the digital transformation strategy. The tool used to gather information is the identification; the statistical analysis was through the SPSS version 26 program. The most important results of the study are: digital transformation has an important role in improving the quality of educational service at Mosul University.

**2-**Ali Ahmed Ameen AL-Tabtaba, Mansoor Asadi, (2022). E-learning and its impact on the quality of higher education in Iraq: A survey study to faculty members in Baghdad and Al Mustansiriya universities, literature journal, 1(142). 543-582.

The problem with this study is: What is the impact of e-learning on the quality of higher education in Iraqi universities from the faculty's point of view?

The main objectives of the study are: to reveal the dimensions and implications of e-learning for the quality of higher education in Iraq and to measure its dimensions from the faculty's point of view. Knowledge of the relationship of using e-education on the quality of higher education at Baghdad and Nasriyah Universities. According to the professors' opinions. The tool used to gather information is the identification; the statistical analysis was through the SPSS version 22 program. The study sample consists of 313 university students. The most important findings are: e-education does not contribute to the quality of higher education in Iraq.

**3-**Hong-Van Thi Din, Quynh Anh Thi Nguye, Vietnamese Students Satisfaction toward Higher Education Service: The Relationship between Education Service Quality and Educational Outcomes. European Journal of Educational Research, Volume 10, Issue 3, 1397 - 1410.

The problem of this study: What is the relationship between the five dimensions of the quality of higher education (provision or availability of education, educational means and facilities, educational environment, educational activities, educational outcomes) and the satisfaction of students at Hue University in Vietnam?

The main objectives of the study: to know the dimensions of the quality of educational service at Hue University in Vietnam, to learn about the relationship between the five dimensions of the quality of higher education (provision of education, educational means and facilities, educational environment, educational activities, educational outcomes) and the satisfaction of students at Hue University in Vietnam.

The tool used to gather information is the identification; the statistical analysis was through the SPSS version 22 program. Sample number 2,933 students. The most important results of the study are: there is an impact relationship between the five dimensions of the quality of higher education (provision or availability of education, educational means and facilities, educational environment, educational activities, educational outcomes) and the satisfaction of students at Hue University in Vietnam.

**4-**Zhao, S., & Hu- pang, S. H. (2023). Digital Education of British Universities in the Post-Pandemic Era. Open Journal of Social Sciences, 11, 691-696. E-education at British universities post-pandemic stage, Journal of Social Sciences, No. 11, p. 691-896, 2023.

The problem of this study: How does e-learning contribute to the development of higher education in British universities? The main objectives of the study: to learn

about the most important elements of e-learning in British universities, the researchers used a comparative study between the development of e-learning in Europe, China and Britain. The most important findings are: British universities rely on a sophisticated electronic education system using the following basic elements: Continuous improvement of the e-learning system, establishment of digital platforms and development of talent and competencies in the field of e-learning.

**5-Sabiraguha, A.E & Al.** (2023). Digital in Higher Education in Burundi. *Open Journal of Social Sciences*, 11, 284-297.

This study is problematic: how e-learning affects the quality of higher education in Burundi; the research's objectives are: to discover and analyze reality E-learning at Burundian universities. The tool used to gather information is the identification. The statistical analysis was through the SPSS program, the number of individuals 343 students. The most important findings are: 16.3% of respondents see the use of ICT in universities, and 89.5% do not use computers and e-education.

### **Commentary on Previous Studies**

Previous studies have dealt with digitization and its relationship to the quality of higher education according to general elements of this study. We address the impact of digitization on the improvement of the quality of higher education in accordance with the dimensions of the quality of higher education in Algerian universities.

### **Study Model**

In this study our independent variable is digitization and variable quality of educational service in higher education, we want to know the impact of digitization on the quality of educational service in its three dimensions: the new curriculum and its existence, efficient teaching frameworks and quality process resources.

### **Theme 1: The Theoretical Framework of The Study**

This is divided into two parts. Part I is devoted to the conceptual and theoretical aspect of digitization. Part II is devoted to theoretical concepts regarding the quality of educational service in the higher education sector.

#### **First: Concepts in Digitization**

This element addresses the definition, importance and digitization of digitization in the higher education sector.

##### **1. Definition of digitization**

Before addressing the definition of digitization, we initially try to learn about the concept of digital transformation. Digital transformation is a comprehensive process that organizations adopt using ICT, digital technologies and automation in their work. Kamal Alwan Muhaysen, Ali Saad Alwan, the role of digital transformation in improving the quality of education and its sustainability as a case study at Wasit University (Ali Saad Alwan & Kamal Alwan Muheisen, 2024, p

234). Digitization is linked to the use of ICT and the use of industrial bricklayers (Ali Cheshmehzang, 2021, p 27). It is also defined as the shift from traditional to digital style, i.e. electronic business execution (Dubart Justine, 2021, p 4).

## **2. Advantages of using digitization**

Digitization is defined as the organization's reliance on a distinctive system of performance and business execution based on ICT. The most important advantages provided by digitization are: enhancing the efficiency and quality of services provided to customers, earning time and effort, accuracy in the quality of services provided and reducing the errors challenged when providing them (Rabiaa Ataa Allah, Essaadi, 2024, p 38).

The importance of using digitization is the facilitation and flexibility of doing business as the employee has become doing his work at all times and from anywhere. Easy and fast access of goods and services to customers, providing easy storage of information, files and documents based on electronic archives rather than paper archives and protecting them from damage and theft through sophisticated security programs.

Bashar Abdul Hussein Hassan, Ali Hamza Al-Karawi, E-governance and its role in promoting organizational change, analytical research to view a sample of staff in the Najaf Health Service

(Bashar Abdul Hussein Hassan & Ali Hamza Al-Karawi, 2024, p 63).

In addition to the above, digitization ensures the creation of an electronic document system (digital) that helps to store and save information and files, It provides ease and flexibility for extinguishers to access and earn time and effort (Uday Hatem Alwan Saleh & Mahdi Mohammed Al Hasnawi, 2023, p 46,47).

## **3. Digitization in Higher Education Sector**

Digital transformation in education means the use of digital technology in the education system in order to serve all sides of the educational process (administrators, masters and students). The most important services guaranteed by e-learning are: admission, e-registration, teaching and different services (Karim sayoud, 2023, p175).

Universities use digital platforms in education, communication between ladies and students, management and responding to students' concerns and questions, which has facilitated and improved the effectiveness of university services provided (Munari Teknik Informatika & Amik Tri Dharma, 2024, 446).

During the coronavirus pandemic, distance education has evolved in schools and universities and has become a key indicator of the development of the higher education sector (Zhao S & Hu pang S H, 2023, p 691).

### **Second: Concepts in the quality of higher education**

In this area, we recognize the concept of the quality and importance of higher education and the most important criteria adopted in measuring it.

#### **1. Definition of quality of higher education**

Before presenting the concepts relating to the quality of higher education, we give an overview of the public service, since higher education services are public services. The public service's concept is linked to all public activities of interest to the citizen and that meet his needs and interests (Leonardo Antonacci & Barone Santos, 2024, p 519). Performance in public organizations such as public

universities is related to achieving the goals in order to provide high quality services and satisfy customers (Bernabé Fochie Tuebou, 2024, p 2699).

The higher education sector is one of the vital sectors that provides public service is education that contributes to the improvement and development of the economic and social life of individuals, communities and nations. Therefore, today university institutions seek to constantly improve their educational services in order to achieve effectiveness and access to the quality of higher education. The promotion and development of the education sector depends on the principle of excellence in the quality of services provided (Jun Luo & Sarana Photchanachan, 2022, p 2).

It is also defined as a set of standards owned by the educational institution that enable it to excel in work based on several elements: effective leadership, optimal use of the human, material, financial, policies and curricula to satisfy the beneficiaries of the educational process (Wafa Jawad Kazem Al-Yousif & Saleh Mahdi Al-Amri, 2022, p 26). The quality of higher education is a new method used with the aim of continuously improving the educational process and its outputs, and can be applied in all units, interests and departments of the university such as colleges, departments and terraces.

(Kwarteng Alpert, G. & Faihul, Sammy, K, 2021, p. 5) The quality of higher education is linked to students' satisfaction with the educational services provided (Dinh, H & Al, 2021, 446).

Through the above, it can be said that the quality of higher education is a set of characteristics and features of the educational process, its products in order to provide the economic, social and knowledge needs of society, by directing human resources, infrastructure, programs and all processes, to work effectively and efficiently towards achieving the goals.

There is a set of elements specific to the quality of higher education:

- ❖ student where students must be selected before entering the university
- ❖ The faculty constitutes professors as they contribute to improving the quality of higher education through the transfer of information and knowledge in an effective way.
- ❖ Curricula or methods used in the educational process must be based on modern scientific methods and digitization that contribute to increasing the knowledge and capacity development of students.

The most important criteria adopted in the quality of higher education are: the quality of the infrastructure of the place of the educational process, the continuous improvement, the results of educational achievement, the quality of financial expenditure, material and the quality of management (Widad Youcef Mohamed, 2022, p 57,58).

## **2. The importance of the quality of higher education**

The importance of the quality of higher education is as follows: developing competencies and skills for teachers and administrators, improving students' level of education, increasing cooperation and coordination between the higher education sector, institutions and other sectors and society (Ali Ahmed El hiali & Al, 2022, p 407).

From another point of view, the importance of the quality of higher education is to improve the performance of academics and university professors, increase the efficiency of educational institutions and improve students' level of education. Increase universities' competitiveness and enhance competitive advantage. The quality of higher education plays a key role in sustaining and supporting the development and improvement of university education (Husam Ali Mhissan & Abass Aoud Abdelmouhssin, 2021, p87).

Digitization helps develop science, knowledge and education, enabling educational institutions such as universities to exploit and manage technologies Appropriate technological methods in education such as distance learning platforms (Amani Abdoul Khaliq Abdullahussen, 2020, p 254).

### **3. Educational Service Quality Standards in Higher Education Sector**

Some researchers consider that the quality of educational service in the higher education sector requires some criteria, the most important of which are:

#### **3-1 Good Educational curriculum and their quality**

Educational curricula and programs play a key role in educational achievement and improving students' standard. This component requires three basic stages: curriculum formulation, application, and continuous development and improvement of the curriculum in order to ensure quality.

#### **3-2 Efficient Teaching Framework**

means professors and staff competence and the management of university institutions that must have efficient and effective administrative staff in addition to the above ICTs such as digitization should be used in the development of the educational process.

#### **3-3 Resource**

means the provision of resources necessary for the success of the education process and includes human resources, material resources from organs, means, supplies and financial resources (Iman Najm Al-Din Abdullah Ruba & Adnan Muhammad Al-Chabaqji, 2024, p 45).

According to some research conducted in Vietnam, the model for measuring the quality of higher education is based on five basic criteria: Access to education, educational means and facilities, educational environment, educational activities, results of the educational process (Hong-Van Thi Din & Quynh Anh Thi Nguyen, 2023, 1399).

### **Theme II: Field of Study**

The applied aspect of the study was in the Faculty of Economics, Commercial Sciences and Management Sciences, University of Blida 2, a survey of the views of a sample of students in the college on the reality of digitization and its relationship to improving the quality of the educational service provided.

#### **I. Procedures and tools**

##### **1. Study Methods and Tools**

Community, sample study and tools used were identified.

### **1-1 Society and Sample Study**

The study community consists of all students of the Faculty of Economics, Commercial Sciences and Management Sciences, University of Blida 2, while the study sample was selected a random sample of 250 students. During the period of this research, which is two months from 5 April 2024 to 05 Joan 2024.

### **1-2 Study Tool**

Identification is one of the most important tools that helps the researcher. It has been relied upon as a key tool to learn the views of the interrogators, designed to achieve the study's objectives. The identification consists of three main sections:

**Section I:** Personal Data (Sex, Age)

**Section II:** devoted to independent variable digitization consists of 11 paragraphs.

**Section III:** The subordinate variable is devoted to the quality of the educational service, consisting of 13 paragraphs and three criteria for the quality of higher education:

**First, Good curricula and its quality:** include five paragraphs: University Blida 2 of provides the Quality Cell for Higher Education. The College uses good systems and curricula in education. The curricula used keep pace with the University's openness to the economic sector. It conducts ongoing courses to develop curriculum skills. Review and develop curricula on an ongoing basis.

**Second, Competent teaching frameworks:** Four paragraphs included: There are qualified professors in the field of information and communication technology, ongoing training courses for teaching staff, identification of differences between current and required performance and development of appropriate capacities to keep pace with digital transformation, establishment of partnership agreements with national and external institutions and universities to develop the quality of higher education.

**Third, the quality process resources:** included four paragraphs: human resources, material resources, financial resources and the availability of ICT tools and tools.

### **1-3 Sincerity of Questionnaire**

#### **1-3-1 virtual Honesty**

The credibility of the arbitrators was relied upon in order to ascertain his honesty, as he was presented to a group of competent professors for his arbitration.

Based on the Lycart quinquennial scale of five options not fully approved 1 Not approved 2 Neutral 3 OK 4 completely OK 5. By the following table:

Table 1: Scale Values of Licart Pentathlon

Data	Weights
Completely disagreeable	1
Disagreed	2
Neutral	3
OK	4
Totally OK	5

Source: Researchers' preparation based on previous studies

### 1-3-2 Questionnaire's Consistency

In order to know the stability of the questionnaire and the consistency of its paragraphs, Alfa Chrombach coefficient was calculated and the results are represented in table 2.

Table 2: Value of the Alfa Chrombach coefficient for study variables

Data	Value of Alfa Chrombach Coefficient	Evaluation
Section I: Digitization 11 paragraphs	0.77	Good
Section II: Quality of educational service 13 paragraphs	0.83	Good
All identification paragraphs 24	0.84	Good

Source: Prepared by researchers based on SPSS output version 22.

Through table 2, the value of the alpha-krombach factor for the digitization variable was 0.77, which is high. For the second variable, the quality of the educational service was 0.83, which is at a good level. For all paragraphs of the identification, the value of the alpha-krombach coefficient was 0.84, which is high.

The data were statistically processed by the IBM SPSS 22 Statistics Statistical Packaging Program, which relied on the statistical descriptive analysis of the data covering the computational average, standard deviation, percentages. The alpha-krombach coefficient for measuring questionnaire stability, the correlation measuring correlation ratios between study variables, the Stewdent t test for the simple regression coefficient used to determine the degree of impact of the independent variable digitization in the educational service quality variable, and the Fischer F test.

## Analysis of The Study's Findings

### 1 Analysis of Results Related to Personal Variables

#### 1-1 Distribution of Samples by by Sex

Table 3: Distribution of Personnel Sample by Sex

Personal Data (Sex)	Number	Percentage%
Male	140	56%
Female	110	44%
Total	250	100%

Source: Prepared by researchers based on SPSS output version 22.

Through this table the sample members of the female sex show us a little older than the male sex.

#### 1-2 Distribution of Sample Personnel by Age

Table 4: Distribution of Personnel Sample by Age

Personal Data (Age)	Number	Percentage%
From 18 to 23 years old	130	52%
24 to 29 years old	85	34%
30 to 35 years old	20	8%
35 to 39 years old	10	4%
40 years and above	5	2%
Total	250	100%

Source: Prepared by researchers based on SPSS output version 22.

## 2 Data Analysis

### 2 - 1 Descriptive Statistics for Independent Variable Digitization “Data Analysis”

arithmetic average and standard deviation were calculated and the results were shown in table 5.

Table 5: Arithmetic Average and The Standard Deviation of The Digitization Variable

Number	Data	Arithmetic Average	Standard deviation
1	The College has enough computers	3.81	0.65
2	College staff and professors use sophisticated computers	3.52	0.74
3	Internet availability	3.47	0.61
4	Other communication (fax, intranet, extranet) are available	3.42	0.59
5	The College uses sophisticated	4.1	0.81

Number	Data	Arithmetic Average	Standard deviation
	information systems to protect students' personal information		
6	Students are registered electronically remotely through a suitable digital platform	4.3	0.68
7	The College uses electronic educational platforms for distance learning	4.4	0.70
8	The College uses electronic educational platforms for distance learning	3.9	0.69
9	The college uses the student's digital file	3.44	0.59
10	The composition of the faculty's staff in the field of electronic management facilitates the communication process between management and students	4.1	0.68
11	Study days and awareness-raising for students on the use of distance learning platforms such as Progresses Platform, Model Platform and other platforms	2.3	0.80
Total	Digitization Total paragraphs 11	3.51	0.78

Source: Prepared by researchers based on SPSS output version 22.

By analyzing this table, paragraph 7 shows that the file for university services is sent. (accommodation, transportation, food, grant) electronically has the largest average calculation of 4.4 degrees very OK. This is explained by the use of digitization in obtaining various university service cards, followed by paragraph 6. Students are registered electronically remotely via a suitable digital platform 4.3 degrees very OK, paragraphs 1, 2, 3, 4, 5, 8, 9, 10. It has averages of calculation to an acceptable degree. Paragraph 11: Students' study days and awareness regarding the use of distance learning platforms such as the Progresses platform, Model platform and other platforms have an average calculation of 2.3 and are not approved. The computational average for the digitization variable is 3.51 degrees of approval, which is explained by the fact that most students see the elements of digitization in the Faculty of Economics, Commercial Sciences and Management Sciences.

## **2-2 Analysis of Descriptive Statistical Data of The Dependent Variable “Quality Of Educational Service”**

Arithmetic average and the standard deviation of the educational service quality variability were calculated and illustrated in Table 6.

Table 6: Arithmetic Average and Standard Deviation of “Educational Service Quality” in Higher Education

Data	Arithmetic Average	Standard deviation
New educational program and its quality	3.41	0.63
Efficient Teaching Frameworks	3.44	0.72
Quality Process Resources	3.40	0.69
Total standards (quality of educational service 24 paragraphs)	3.41	0.68

Source: Prepared by researchers based on SPSS output version 22.

By analyzing this table, the computational averages of the three dimensions of higher education quality are close and are in approval grade. The efficient teaching frameworks, has the highest average arithmetic of 3.44. The result demonstrates the availability of competent professors in the college, and this result is in accordance with the views of the students interviewed.

### Testing the Validity of The Study's Hypotheses

#### 1. Main Hypothesis

There is a statistically significant impact relationship between the use of digitization and the quality of educational service in higher education at the Faculty of Economics, Commercial Sciences and Management Sciences, Blida 2 University at a morale level of 0.05%.

#### Model Interpretive Capability Test

It was calculated “Pearson R correlation coefficient, R2 determination coefficient, Fischer F test” between the independent variable digitization and the dependent subordinate variable educational service quality in higher education and the results shown in table 7 as follows:

Table 7: Study Model Test

Pearson Coefficient R	Determination Coefficient R <sup>2</sup>	Fischer F Test	Level of Morale Sig
0.68	0.292	7.221	0.008

Source: Prepared by researchers based on SPSS output version 22.

This table shows us that the value of the Pearson R coefficient is 0.68. This confirms a positive correlation of 68% between digitization and the quality of educational service in the Faculty of Economics, Commercial Sciences and Management Sciences at university of Blida 2. The remainder is due to other reasons. The R2 determination coefficient value was 0.292. This indicates that any increase in the quality of educational service in the Faculty of Economics, Commercial Sciences and Management Sciences is explained by digitization at 29.2%. For the Fischer F test the morale level is 0.008 which is less than 0.05. This means that, the model is good and it can be relied upon in this study.

To test the validity of the main hypothesis, simple linear regression was running between the two digitization variables and the quality of educational service in higher education. Table 8 below illustrates more that.

Table 8: T Test for Study Variables

Study Variables	Value of $\beta$	Calculated t Value	Level of Morale Sig
Digitization	2.901	3.746	0.008
Quality of Educational Service	0.495	3.736	0.008

Source: Prepared by researchers based on SPSS output version 22.

Through this table, the calculated value of  $t$  is 3.746 and 3.736, which is greater than the value found in table 1.95. The level of morale is less than 0.05. This confirms the validity of the main hypothesis. There is a statistically significant impact relationship between the use of digitization and the quality of the educational service in higher education in the Faculty of Economics, Commercial Sciences and Management Sciences, university of Blida 2 at a morale level of 0.05%, meaning that any increase in the quality of educational service is due to digitization by 49.5%.

### Partial Hypothesis Testing

#### 1. First Secondary Hypothesis

There is a statistically significant impact relationship between digitization and after the new programs and its existence for the quality of higher education in the Faculty of Economics, Commercial Sciences and Management Sciences, Blida University 2 at a morale level of 0.05%.

To test the validity of this hypothesis, simple linear regression between the two digitization variables and the new curriculum and its quality of educational service quality in higher education has been used and the results are shown in Table 9:

Table 9: First Secondary Hypothesis Test Values

Dependent variable	R value	t value	Value of $\beta$	Level of morale Sig
New Programs	0.590	2.988	0.345	0.009

Source: Prepared by researchers based on SPSS output version 22.

This table shows us that the value of the Pearson R coefficient is 0.590. This confirms a positive correlation of 59% between the use of digitization and after the new curriculum and its existence for the quality of educational service in the Faculty of Economics, Commercial Sciences and Management Sciences. The value of  $t$  is: 2.988 is greater than the value of table  $t$  1.95 and the level of morale is 0.009 below 0.05. This hypothesis is validated by a statistically significant impact relationship between digitization and after the new curriculum and its existence for the quality of higher education in the Faculty of Economics, Commercial Sciences and Management Sciences, university of Blida 2, at a morale level of 0.05%.

## 2. Secondary Hypotheses II

There is a statistically significant impact relationship between the use of digitization and after efficient teaching frameworks for the quality of higher education at the Faculty of Economics, Commercial Sciences and Management Sciences, university of Blida 2, at a morale level of 0.05%.

To test the validity of this hypothesis, simple linear regression between digitization variables and efficient teaching frameworks was used for the quality of educational service in higher education, as the results are shown in table 10.

Table 10: Second Secondary Hypothesis Test Values

Dependent variable	R value	t value	Value of $\beta$	Level of morale Sig
Efficient Teaching Frameworks	0.660	3.125	0.540	0.009

Source: Prepared by researchers based on SPSS output version 22.

This table shows us that the value of the Pearson R coefficient is: 0.660. This confirms a positive correlation of 66% between digitization and after quality teaching frameworks for the educational service in the Faculty of Economics, Commercial Sciences and Management Sciences.

The value of t is: 3.125 and is greater than the value of t tabular 1.95. The level of morale is 0.009 below 0.05. This hypothesis is validated by any statistically significant impact relationship between digitization and after efficient teaching frameworks for the quality of higher education in the Faculty of Economics, Commercial Sciences and Management Sciences, University of Blida 2. At a morale level of 0.05%.

## 3. Secondary Hypothesis III

There is a statistically significant impact relationship between digitization and after quality process resources for higher education quality at the Faculty of Economics, Commercial Sciences and Management Sciences, university of Blida 2, at a morale level of 0.05%.

To test the validity of this hypothesis, simple linear regression between the two digitization variables was used and after the quality process resources for the quality of educational service in higher education. The results are illustrated in table 11.

Table 11: Third Secondary Hypothesis Test Values

Dependent variable	R value	t value	Value of $\beta$	Level of morale Sig
Quality Process Resources	0.410	4.277	0.300	0.009

Source: Prepared by researchers based on SPSS output version 22.

Through this table it is clear to us that the value of the Pearson R coefficient is: 0.410 This confirms a positive correlation of 41% between digitization and after

the quality process resources of the educational service in the Faculty of Economics, Commercial Sciences and Management Sciences.

The value of t is: 4.277 which is greater than the value of t tabular 1.95. The level of morale is 0.009 below 0.05. This hypothesis is validated by any statistically significant impact relationship between digitization and quality process resources for the quality of higher education in the Faculty of Economics, Commercial Sciences and Management Sciences, at university of Blida 2, at a morale level of 0.05%.

### **Conclusion**

Through our study of the topic of the contribution of digitization to improving the quality of educational service, we have reached a set of results:

- ✓ The digitization of higher education is: the use of ICT and digital technologies in the education system in order to improve the educational process through its services: admission, electronic registration, distance teaching and other services.
- ✓ In recent years, Algeria has adopted a digitization approach in the higher education sector in order to improve the process of education and various educational services and improve this sector, which is an important sector in the achievement of development.
- ✓ There is a positive impact relationship between the use of digitization and the quality of educational service in higher education at the Faculty of Economics, Commercial Sciences and Management Sciences, University of Blida 2.
- ✓ There is a positive impact relationship between the use of digitization and the new curriculum with its existence for the quality of higher education and the quality of educational service in higher education at the Faculty of Economics, Commercial Sciences and Management Sciences, University of Blida 2.
- ✓ There is a positive impact relationship between the use of digitization and after the efficient teaching frameworks for the quality of higher education at the Faculty of Economics, Commercial Sciences and Management Sciences, University of Blida 2.
- ✓ There is a positive impact relationship between the use of digitization and the quality process resources of higher education quality at the Faculty of Economics, Commercial Sciences and Management Sciences, University of Blida 2

### **Recommendations for Future Studies**

At the end of this study we make some suggestions that we truly think that they can be fitted:

- ❖ Create a website or an online platform at the college level for students' questions and concerns.
- ❖ Ongoing training courses for students on the use of new technologies for e-learning.
- ❖ Ongoing training courses for staff and professors on ICT use and digitization in university institutions

## Study Prospects

It was suggested by researchers that there are some topics needed to be addressed for future studies as follow:

- Use of artificial intelligence in higher education.
- The role of digitization in the effectiveness of the performance of university institutions.

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