

The Requirements of Digital Transformation and Its Economic Applications To Achieve a Competitive Advantage in Major Sports Clubs In the Arab Republic of Egypt

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Research Problem and Importance:

Under accelerated developments of information and communication technology, many administrative directions emerged towards adopting digital transformation.

Tomas M. Siebel (2019), George Westernman (2014) defines digital transformation as a phenomenon arising from using information and communication technologies and new digital techniques synchronically to produce a lot of information to use in decision making and strategic planning. (59: 26), (47: 32)

The researcher believes that digital transformation he researcher believes that the digital transformation is changing the structure of the institution and building its strategy on digital technology and the technical capabilities it possesses to achieve value for its customers.

UNESCO (2018) and Sara Grand (2017) defines digital skills as along chain of skills of using digital appliances, communications and works applications to reach and administrate information and establishing a digital content. (41: 2), (58: 5).

Communication International Federation (2018) indicates that digital skills are subdivided to 3 levels: basic, average and advanced skills. (23: 18)

Giacomo and Antonio (2018) and Ovidiu, Peter (2013) indicate that things internet links infinite number of things via a network with availing the relevant technical support. (48: 34), (56: 167).

Bruce Sinclair (2017) indicates that computers ability to knowledge by using things internet-collected data enables us to follow up and count things. (45: 16)

Kevin L. Jackson and Scott (2018) define cloud computerization the set of computerized sources and systems on demand via internet able to avail some of integrated computer services. (54: 12)

Financial Crises of (2008) affected the confidence between governments and companies, also weak and unsafe information technologies and users' increasing fear from lack of privacy and safety resulted in the so called blue kitchen technique. (44: 13).

David, Christophe (2019) defines blocks chain as distributing data to a great number of points spread on internet which is computers entrusted with verifying true data and operations (46: 23).

Book of **Jared Tate, Andrew Knapp (2019)** mentions that blocks chain consists of 4 main elements represented in: block, information. Margin and time print. (50: 27)

Joel Gurin (2014) and Rob Kitchen (2014) define open data as publishing digital data on internet in an automatic legible format. (52: 18), (57: 17)

Julian Singh (2017) indicates that for data to be open many levels shall be considered: legal opening, technical opening and commercial opening. (53: 44).

Beshir Arnous (2007) and Srour Ali Srour (2005) defines artificial intelligence as a part of accounting science looking for developed programming methods for carrying out works and

conclusions similar to methods alluding intelligence to human. (10: 9), (39: 26)

Mohit Sharma (2018), Khalil Abo Koura (2014) define systems of automating robot processes as non-intertwined applications requiring no technical integration with other system. (55: 11), (37: 19)

Ramadan Elmarouf (2011), Abdelsabour Elmasry (2011) and Hind Hamid (2010) define ecommerce as all business made electronically via internet. (34 : 34), (2: 24), (21 : 17)

Jim Work George Brand (2020) mentions that applying ecommerce shall depend on three factors: "E. markets, E. data exchange and internet". (51: 57)

As **Gil Gildner, Anya Gildner (2019) and Youssef Abo Fara (2007)** define E. marketing as some efforts exerted by the company to inform purchasers of its products and services and communicating with them via internet. (49: 14), (42: 27)

Egypt adopter a serious direction to be a digital community as a basis of achieving integrated and permanent development, at the first step of transferring to digital economy in Egypt, the first Egyptian communication satellite, Tiba, was developed (1). (60), (68), (61: 2), (62:1).

In the sports field, there are many new attempts to attend digital transfer, as minister of youth and sports, in coordination with officials of Microsoft Egypt looked into binary cooperation in the field of digital transformation. (63: 1)

Also El Ahly Club adopted the digital transformation strategy incorporated under its future plan to transfer all services provided to members electronically, also Heliopolis Club and Kuwait National Bank – Egypt signed a cooperation protocol to support and activate digital transformation system, also Smouha Club declared a protocol of cooperation with Egypt telecom to develop the internet infra-structure.

(64: 2), (65: 1), (66: 1), (67: 2).

The researcher concluded a **Pilot Study** for some supreme management officials at clubs whose number reached 6 subjects to identify the status quo and procedures taken by the supreme management to make development needed for applying digital transformation. **The interview results proved** the supreme management's awareness of the importance of adopting digital transformation strategies.

Also the researcher concludes a second pilot study for a sample of sports clubs' employees, whose number reached (11) subjects to identify the fact of digital transformation inside sports clubs, as the results proved establishing an interactive website, the main club's data bases are being updated, the club's infrastructure is being developed and protocols of cooperating with banks are being signed to support digital transformation projects.

Also through looking into the previous studies results such as results of Nawal Abdalla (2019) (30), Hanin Abdelasalam(2019) (18), Faleh Abbas (2019) (14), Tawil Osama (2017) (40), Dina Mohamed Adel (2016) (12), digital transformation contributes to providing high quality digital governmental services , good planning for transfer to e administration in sports department is lacking.

As study of **Omar Saleh (2018) (33) and Khloud Bent Salem (2019) (24)** recommends that there should be an infrastructure to enable profiting from E. government services and availing human resources to develop the same and financial resources to avail systems required for concluding digital transformation.

Through the researcher open personal interviews, the survey study and the results and recommendations of previous studies, the researcher concluded the importance of activating digital transformation system in sports clubs and adopting modern communication systems to transfer all services provided to members electronically in order to achieve the satisfaction of the

beneficiaries, and to support the competitiveness of sports clubs. Researcher to conduct the current research and its title:

This made the researcher carry out this research titled:

"The Requirements of Digital Transformation and Its Economic Applications to Achieve a Competitive Advantage in Major Sports Clubs in the Arab Republic of Egypt"

The Research Objective:

The research aims at identifying **The Requirements of Digital Transformation and Its Economic Applications to Achieve a Competitive Advantage in Major Sports Clubs in the Arab Republic of Egypt** via identifying:

- **Digital transformation requirements: "supreme management support, digital skills, digital techniques"**
- **Digital transformation economic applications: "E. commerce, E. marketing"**

The Research Procedures:

The research method:

The survey descriptive method was used as suitable for the research nature.

The research community:

The research community consisted of (9) great clubs from Cairo and Alexandria.

The research sample:

Table (1) Numerical Description of the Research Community Groups Subjects and the Pilot and the Main Research Sample

Administrative levels	Total research community	Sample of codifying questionnaire form	Removed forms	Main Search Sample	
				Number	Percentages
Supreme management : clubs boards' members	99	11	5	83	83.83 %
Middle management: executive managers and sports activity mangers	25	6	3	18	64 %
Executive management: sports specialists	123	21	13	89	72.35 %
Total	247	38	21	188	76.113 %
Percentage	100 %	15.38 %	8.502 %	76.113 %	

Data Collection Tools:

Questionnaire form designed by the researcher

The researcher followed the following steps to design the questionnaire form: - Results of the interview, the first and second exploratory study. - Access to the scientific references and the results of previous studies. Through this, the researcher was able to develop the factors and dimensions of the questionnaire, as it included two main factors, first factor of (3) dimensions, and second factor of (2) dimensions.

Questionnaire form scientific coefficients:

Calculating validity questionnaire form scientific coefficient:

Table (2) Correlation Coefficient between Questionnaire Dimensions and Factors (N= 38)

Factors and dimensions		First factor				Questionnaire total degree
		First factor	Second factor	Third factor	Total factors degree	
First factor	First dimension		0.585	0.785	0.745	0.839
	Second dimension			0.617	0.737	0.877

	Third dimension				0.759	0.851
	Total degree					0.845
Factors and dimensions		Second factor				Total questionnaire degree
	First dimension		0.791		0.534	0.749
	Second dimension				0.609	0.830
	Total degree					0.839

Rg value (0, 05. 36) = 0,304

Table (2) clarifies a statistical significant correlation at significant level (0.05) between the degree of every factor and the whole degree to prove questionnaire internal consistency.

Calculating questionnaire reliability coefficient:

Table (3) Questionnaire Reliability by Split Half and Cronbach's Alpha

Factors and Dimensions	Split half		Cronbach's Alpha
	Spearman Brown	Guttman	
First dimension: supreme management support	0.716	0.763	0.776
Second dimension: digital skills	0.789	0.817	0.749
Third dimensions: digital technique	0.745	0.736	0.705
First factor: requirements of digital transformation to achieve a competitive advantage at sports clubs	0.821	0.755	0.781
First dimension: E. commerce	0.715	0.873	0.775
Second dimension: E. marketing	0.763	0.851	0.723
Second factor: economic applications of digital transformation to achieve a competitive advantage at sports clubs	0.746	0.757	0.806
Total questionnaire degree	0.721	0.918	0.881

From table (3) it is clear that reliability coefficient by half split ranged between (0.715) and (0.918) and Cronbach's Alpha reliability coefficient ranged between (0.705) and (0.881) proving that the researched questionnaire has a high reliability coefficient.

Application of the questionnaire form:

The questionnaire form was applied in its final form to the basic research sample, which amounted to (188) single, during the period from (6/12/2020) to (18/8/2020).

Statistical treatments:

Repetitions, percentage, spearman's rank correlation coefficient, split half for Spearman Brown and Guttman, Cronbach's Alpha reliability coefficient, outweighed percentage, arithmetic mean out weighted by weights, chi square for independent samples (cross tabulation), chi square for one sample, (Chi Square Goodness of Fit Test).

Discussing results:

Table (4) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (First Dimension: Supreme Management Support)

S	Statement content	Departments	Agreeing	To a certain degree	Disagreeing	Out weighted percentage	Average	Attitude	Chi square
1	The supreme management supports digital transformation via :								
1/1	Looking into new techniques	Supreme management= 83	66	9	8	89.96	2.70	agreeing	7.49
		Middle management= 16	9	2	5	75.00	2.25	to a certain degree	
		Executive management= 89	61	8	20	82.02	2.46	agreeing	
		All= 188	136	19	33	84.93	2.55	agreeing	
1/2	Readiness for bearing	Supreme management= 83	62	13	8	88.35	2.65	agreeing	15.15 *

S	Statement content	Departments	Agreeing	To a certain degree	Disagreeing	Out weighted percentage	Average	Attitude	Chi square
	digital transformation application costs	Middle management= 16	8	2	6	70.83	2.13	to a certain degree	93.23
		Executive management= 89	54	7	28	76.40	2.29	to a certain degree	
		All= 188	124	22	42	81.21	2.44	agreeing	
1/3	Training employees and providing them with all skills needed for attending technique permanently	Supreme management= 83	64	11	8	89.16	2.67	agreeing	15.72 *
		Middle management= 16	9	1	6	72.92	2.19	to a certain degree	
		Executive management= 89	58	4	27	78.28	2.35	agreeing	
		All= 188	131	16	41	82.62	2.48	agreeing	
1/4	Planning for dealing with restrictions of using new techniques	Supreme management= 83	67	8	8	90.36	2.71	agreeing	13.18 *
		Middle management= 16	10	1	5	77.08	2.31	to a certain degree	
		Executive management= 89	51	13	25	76.40	2.29	to a certain degree	
		All= 188	128	22	38	82.62	2.48	agreeing	
2	The club's organizational structure agrees with digital transformation application	Supreme management= 83	59	12	12	85.54	2.57	agreeing	14.58 *
		Middle management= 16	6	3	7	64.58	1.94	to a certain degree	
		Executive management= 89	44	12	33	70.79	2.12	to a certain degree	
		All= 188	109	27	52	76.77	2.30	to a certain degree	
3	There is a specialized committee or unit for applying digital transformation as planned	Supreme management= 83	60	15	8	87.55	2.63	Agreeing	15.41 *
		Middle management= 16	7	3	6	68.75	2.06	to a certain degree	
		Executive management= 89	48	12	29	73.78	2.21	to a certain degree	
		All= 188	115	30	43	79.43	2.38	agreeing	
4	The club documents services and transforms paper forms to electronic ones	Supreme management= 83	56	4	23	79.92	2.40	agreeing	8.82
		Middle management= 16	7	2	7	66.67	2.00	to a certain degree	
		Executive management= 89	45	14	30	72.28	2.17	to a certain degree	
		All= 188	108	20	60	75.18	2.26	to a certain degree	
5	Information systems used by the club are integrated and associated with all the	Supreme management= 83	51	8	24	77.51	2.33	to a certain degree	5.72
		Middle management= 16	6	2	8	62.50	1.88	to a certain degree	

S	Statement content	Departments	Agreeing	To a certain degree	Disagreeing	Out weighted percentage	Average	Attitude	Chi square
	club's units	Executive management= 89	41	12	36	68.54	2.06	to a certain degree	46.77
		All= 188	98	22	68	71.99	2.16	to a certain degree	
6	Consulting investment authorities and experts to give information about developing information technology fields	Supreme management= 83	60	2	21	82.33	2.47	agreeing	15.35 *
		Middle management= 16	5	3	8	60.42	1.81	to a certain degree	
		Executive management= 89	46	9	34	71.16	2.13	to a certain degree	
		All= 188	111	14	63	75.18	2.26	to a certain degree	
7	The club has a system for evaluating employees performance indicating clear norms of their ability to use information technology applications	Supreme management= 83	50	9	24	77.11	2.31	to a certain degree	5.43
		Middle management= 16	5	2	9	58.33	1.75	to a certain degree	
		Executive management= 89	49	12	28	74.53	2.24	to a certain degree	
		All= 188	104	23	61	74.29	2.23	to a certain degree	

Chi square value (0, 05, 4) = 9,488, Chi square value (0, 05, 2) = 5,991

Outweighed arithmetic mean: disagreeing (1: 1.66), to a certain degree (1.67 : 2.33), agreeing (2.34 : 3)

From table (4) agreement of research sample groups on statements number (1/1, 4, 5, 7) was clear as the outweighed percentage of the whole sample ranged between (71.99: 84.93) as chi square ranged between (5.43: 8.82)

Results of study of Doaa Elhasban, Weaam Elhayek (2017) (13) indicate the importance of appointing an authority responsible for supervising and following up digital transformation.

Saad Shalaby and Abdellatif Bokhary (2008) (35) confirm that clubs delaying in using new technologies will lag behind other clubs.

Also the above table results proved difference between opinions of the research sample groups on statements number (1/2, 1/3, 1/4, 2, 3, 6) at level (0.05) as chi square ranged between (13.18*: 15.72*) with outweighed percentage (75.18: 82.62).

Results of study of Mahmoud Ibrahim and Bassma Haddad (2018) (25), and Ashour Abdelkarim (2010) (9) found that digital transformation depends on compiling a clear strategy by some field expert.

The results of the study of Ashour Abdul Karim (2010) (9) indicate that the development of the level of employees mainly requires a review of their competence, by integrating the human resources of the institutions within the programs of raising the qualification level, with the aim of compatibility with the developments and the reality of these institutions in light of the digital transformation strategy.

The researcher concludes that the sports club management must develop plans and strategies that support the digital transformation system, the more accurately and clearly formulated, the greater the success rate of its implementation.

Table (5) First Factor Results: Digital Transformation Requirements to Achieve a Competitive Advantage at Clubs (Second Dimension: Digital Skills) (A- Main Skills)

S	Statement content	Departments	Agreeing	To a certain degree	Disagreeing	Out weighted percentage	Average	Attitude	Chi square
8	the club's employees have the main digital skills represented in:								
8/1	Using keyboard	Supreme management= 83	68	7	8	90.76	2.72	agreeing	3.63
		Middle management= 16	10	2	4	79.17	2.38	agreeing	
		Executive management= 89	71	8	10	89.51	2.69	agreeing	
		All= 188	149	17	22	89.18	2.68	agreeing	
8/2	Administrating files in computers	Supreme management= 83	66	8	9	89.56	2.69	agreeing	8.34
		Middle management= 16	9	1	6	72.92	2.19	to a certain degree	
		Executive management= 89	69	9	11	88.39	2.65	agreeing	
		All= 188	144	18	26	87.59	2.63	agreeing	
8/3	Protecting personal and private data	Supreme management= 83	61	11	11	86.75	2.60	agreeing	4.02
		Middle management= 16	8	3	5	72.92	2.19	to a certain degree	
		Executive management= 89	62	12	15	84.26	2.53	agreeing	
		All= 188	131	26	31	84.40	2.53	agreeing	
8/4	Using email	Supreme management= 83	65	8	10	88.76	2.66	agreeing	12.31 *
		Middle management= 16	8	1	7	68.75	2.06	to a certain degree	
		Executive management= 89	70	9	10	89.14	2.67	agreeing	
		All= 188	143	18	27	87.23	2.62	agreeing	
8/5	Browsing , research and assorting data, information and legal content	Supreme management= 83	67	6	10	89.56	2.69	agreeing	9.54 *
		Middle management= 16	9	1	6	72.92	2.19	to a certain degree	
		Executive management= 89	68	11	10	88.39	2.65	agreeing	
		All= 188	144	18	26	87.59	2.63	agreeing	
8/6	Communicating and working in a team through digital techniques	Supreme management= 83	65	10	8	89.56	2.69	agreeing	10.59*
		Middle management= 16	8	2	6	70.83	2.13	to a certain degree	
		Executive management= 89	71	6	12	88.76	2.66	agreeing	
		All= 188	144	18	26	87.59	2.63	agreeing	
8/7	Filling an internet form	Supreme management= 83	66	8	9	89.56	2.69	Agreeing	7,89
		Middle management= 16	8	3	5	72.92	2.19	to a certain degree	
		Executive management= 89	67	11	11	87.64	2.63	agreeing	
		All= 188	141	22	25	87.23	2.62	agreeing	

From table (5) there are significant differences between the research groups response on statements number (8/4, 8/5, 8/6) as chi ranged between (9.54*: 12.31*) with outweighed percentage (87.23: 87.59).

Ahmed Ghoneim (2004) states the main skills to be enjoyed by employees to achieve digital transformation including information techniques and computers (7: 73).

The sample opinions agreed upon statements number (8/1, 8/2, 8/3, 8/7)

Mohamed Fathy (2008) refers to efficiencies, knowledge and skills needed by employees enabling them to use advanced knowledge and technology in fulfilling their tasks (27: 14)

The researcher believes that basic digital skills related to the use of digital devices and Internet applications have become an essential component of a new set of skills that must be available to club employees in the digital era.

Table (6) Results of First Factor: Requirements of Digital Transfer to Achieve a Competitive Advantages at Clubs) (second Dimension: Digital Skills) (B- Average Skills)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
the club's employees has the following average digital skills									8
5.45	Agreeing	2.47	82.33	18	8	57	Supreme management= 83	Evaluating and managing data, information and digital contents	8/8
	to a certain degree	2.06	68.75	6	3	7	Middle management= 16		
	agreeing	2.55	85.02	16	8	65	Executive management= 89		
108.84	agreeing	2.47	82.45	40	19	129	All= 188		
7.38	to a certain degree	2.27	75.50	23	15	45	Supreme management= 83	Digital data design	8/9
	to a certain degree	1.88	62.50	8	2	6	Middle management= 16		
	Agreeing	2.45	81.65	18	13	58	Executive management= 89		
54.27	to a certain degree	2.32	77.30	49	30	109	All= 188		
5.43	to a certain degree	2.34	77.91	21	13	49	Supreme management= 83	Data analysis	8/10
	to a certain degree	1.88	62.50	8	2	6	Middle management= 16		
	Agreeing	2.38	79.40	20	15	54	Executive management= 89		
54.27	to a certain degree	2.32	77.30	49	30	109	All= 188		
6.81	Agreeing	2.36	78.41	22	9	52	Supreme management= 83	Digital marketing	8/11
	to a certain degree	1.88	62.50	7	4	5	Middle management= 16		
	Agreeing	2.38	79.40	23	9	57	Executive management= 89		
70.26	to a certain degree	2.33	77.66	52	22	114	All= 188		
8.67	Agreeing	2.36	78.41	20	13	50	Supreme management= 83	Solving technical problems	8/12
	to a certain degree	1.69	56.25	9	3	4	Middle management= 16		
	to a certain degree	2.28	76.03	27	10	52	Executive management= 89		

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
52.13	to a certain degree	2.27	75.53	56	26	106	All= 188		

From table (6) the research subjects responses agreed upon all statements as chi square ranged between (5.43: 8.67) with an outweighed percentage (77.66: 82.45)

International communication association (2018) mentions that average skills enabling us to use digital techniques are more profitable and feasible (23: 7).

The researcher believes that with the increase of knowledge and skills that the beneficiary acquires from the services in the clubs, the club's inability to match the benefactor increases, which requires more qualification and training for club employees.

Table (7) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Second Dimension: Digital Skills) (C- Advanced Skills)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
the club's employees have the following advanced digital skills :									8
12.48 *	to a certain degree	2.19	73.09	25	17	41	Supreme management= 83	Computerized programming	8/13
	disagreeing	1.63	54.17	9	4	3	Middle management= 16		
	to a certain degree	1.88	62.55	32	6	41	Executive management= 89		
28.44	to a certain degree	1.99	66.49	66	27	85	All= 188		
6.29	to a certain degree	2.07	69.08	29	19	35	Supreme management= 83	Networks management	8/14
	disagreeing	1.56	52.08	10	3	3	Middle management= 16		
	to a certain degree	2.02	67.42	37	13	39	Executive management= 89		
18.33	to a certain degree	2.01	66.84	76	35	77	All= 188		
6.64	to a certain degree	2.19	73.09	26	15	42	Supreme management= 83	Developing digital content	8/15
	disagreeing	1.63	54.17	10	2	4	Middle management= 16		
	to a certain degree	1.97	65.54	39	14	36	Executive management= 89		
24.39	to a certain degree	2.04	67.91	75	31	82	All= 188		
2.35	to a certain degree	2.06	68.67	31	16	36	Supreme management= 83	Ability to create in using digital techniques	8/16
	to a certain degree	1.69	56.25	9	3	4	Middle management= 16		
	to a certain degree	2.01	67.04	36	16	37	Executive management= 89		
18.33	to a certain degree	2.01	66.84	76	35	77	All= 188		

From table from table (7) it is clear that the research sample groups response to all statements

agreed with an outweighed percentage between (66.48 : 67.91) and chi square between (2.35 : 6.64) with a dominant attitude disagreeing and to a certain degree upon that employees have no digital skills like managing networks, developing digital content.

But for statement number (8/13) related to enjoying digital skills by employees such as computerized programming, opinions of supreme and executive administration were to a certain degree

Communication international association (2018) mentions that advanced skills are skills needed by specialists in information technology and communication such as computerized programming and networks management (23: 9).

The researcher believes that digital skills are constantly evolving with changes in technology, allowing policymakers and digital skills providers to ensure the continued relevance and up-to-datedness of their programs and training curricula.

Table (8) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Third Dimension: Digital Techniques) (A- Things Internet)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
8.36	agreeing	2.65	88.35	11	7	65	Supreme management= 83	The club has updated and high speed internet lines	9
	to a certain degree	2.13	70.83	6	2	8	Middle management= 16		
	agreeing	2.46	82.02	17	14	58	Executive management= 89		
112.73	agreeing	2.52	83.87	34	23	131	All= 188		
15.36 *	agreeing	2.75	91.57	8	5	70	Supreme management= 83	There is a link between internet and intranet	10
	to a certain degree	2.19	72.92	6	1	9	Middle management= 16		
	agreeing	2.43	80.90	18	15	56	Executive management= 89		
126.20	agreeing	2.55	84.93	32	21	135	All= 188		
9.62 *	agreeing	2.70	89.96	9	7	67	Supreme management= 83	There are strong anti-hacking programs	11
	to a certain degree	2.25	75.00	5	2	9	Middle management= 16		
	agreeing	2.40	80.15	19	15	55	Executive management= 89		
112.41	agreeing	2.52	84.04	33	24	131	All= 188		
13.70 *	agreeing	2.73	91.16	8	6	69	Supreme management= 83	The network can be technically flexible	12
	to a certain degree	2.31	77.08	5	1	10	Middle management= 16		
	agreeing	2.36	78.65	21	15	53	Executive management= 89		
116.21	agreeing	2.52	84.04	34	22	132	All= 188		
the club has a detailed data base about :									13

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
5.68	agreeing	2.71	90.36	8	8	67	Supreme management= 83	beneficiaries	13/1
	to a certain degree	2.31	77.08	5	1	10	Middle management= 16		
	agreeing	2.55	85.02	16	8	65	Executive management= 89		
151.80	agreeing	2.60	86.70	29	17	142	All= 188		
6.44	agreeing	2.66	88.76	9	10	64	Supreme management= 83	suppliers	13/2
	to a certain degree	2.19	72.92	5	3	8	Middle management= 16		
	agreeing	2.48	82.77	18	10	61	Executive management= 89		
119.05	agreeing	2.54	84.57	32	23	133	All= 188		
11.04 *	agreeing	2.70	89.96	8	9	66	Supreme management= 83	Club's employees	13/3
	to a certain degree	2.06	68.75	6	3	7	Middle management= 16		
	agreeing	2.48	82.77	19	8	62	Executive management= 89		
126.59	agreeing	2.54	84.75	33	20	135	All= 188		
10.85 *	agreeing	2.61	87.15	10	12	61	Supreme management= 83	Olympic leagues and employees	13/4
	to a certain degree	1.94	64.58	7	3	6	Middle management= 16		
	agreeing	2.44	81.27	20	10	59	Executive management= 89		
97.16	agreeing	2.47	82.45	37	25	126	All= 188		

From table (8), it is clear that opinions of the research sample groups agreed upon statements number (9, 13/1, 13/2) as the outweighed percentage reached (83.87 : 86.70) with chi square between (5.68 : 8.36)

Results of Hytham Fayez (2016) (17), Ahlam Alfiki (2014) (4) agreed upon the availability of needed infra-structure helping clubs to activate modern electronic services.

But for statements number (10, 11, 12, 13/3, 13/4) the research sample groups' opinion s varied between agreeing and to a certain degree.

Results of study of Tawil Osama (2017) (40) proves lack of security systems of protecting data of sports departments deals.

The researcher concludes that the activation of the Internet of things will contribute to the expansion of better services in sports clubs, which requires the availability of regular, high-speed Internet services that connect the departments to each other them within the club, as well as allow communication with other parties concerned and not concerned with sports.

Table (9) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Third Dimension: Digital Techniques) (B- Cloud computing)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
11.79 *	agreeing	2.66	88.76	9	10	64	Supreme management= 83	The club uses cloud computerization services and applications supplied by service providers such as Google, Microsoft and Amazon	14
	to a certain degree	2.25	75.00	5	2	9	Middle management= 16		
	to a certain degree	2.28	76.03	23	18	48	Executive management= 89		
81.84	agreeing	2.45	81.56	37	30	121	All= 188		
10.45 *	agreeing	2.52	83.94	12	16	55	Supreme management= 83	Using cloud computerization agrees with the club's activities	15
	to a certain degree	1.94	64.58	7	3	6	Middle management= 16		
	to a certain degree	2.19	73.03	28	16	45	Executive management= 89		
46.10	to a certain degree	2.31	77.13	47	35	106	All= 188		
10.31 *	agreeing	2.58	85.94	11	13	59	Supreme management= 83	Cloud computerization are used to reach applications, resources, data and information on time	16
	to a certain degree	2.00	66.67	7	2	7	Middle management= 16		
	to a certain degree	2.27	75.66	25	15	49	Executive management= 89		
66.90	agreeing	2.38	79.43	43	30	115	All= 188		
14.44 *	agreeing	2.63	87.55	9	13	61	Supreme management= 83	Cloud computerization develops mechanism and means of handling and sharing information	17
	to a certain degree	2.06	68.75	6	3	7	Middle management= 16		
	to a certain degree	2.19	73.3	29	14	46	Executive management= 89		
64.64	agreeing	2.37	79.08	44	30	114	All= 188		
20.47 *	agreeing	2.64	87.95	10	10	63	Supreme management= 83	Information safety factors are available for data and files uploaded to the cloud	18
	to a certain degree	1.94	64.58	7	3	6	Middle management= 16		
	to a certain degree	2.10	70.04	32	16	41	Executive management= 89		
56.82	to a certain degree	2.32	77.48	49	29	110	All= 188		

From table (9), there are statistical significant differences between research groups opinions on all statements as chi square ranged between (10.31*: 20.47*) and outweighed percentage (77.13: 18.56)

Results of study of Safaa Soliman (2019) (36), Alia Abdelmoniem (2014) (8) regarding service providers verifying quality of used network, applications and freedom from any security gaps.

Ahmed Mahgoub (2015) (6) recommends studying service providers in details and identifying security protection supplied by service providers.

The researcher concludes that the use of cloud computing technology in clubs contributes to providing workers with access to computer resources and programs without being bound by time and place limits, and ease of communication between different departments, with the possibility of using them in cloud storage.

Table (10) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Third Dimension: Digital Techniques) (C – Blocks Chain "Blue Kitchen")

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
10.58 *	agreeing	2.69	89.56	8	10	65	Supreme management= 83	There are employees specialized in information security and protection	19
	to a certain degree	2.19	72.92	4	5	7	Middle management= 16		
	agreeing	2.44	81.27	19	12	58	Executive management= 89		
108.65	agreeing	2.53	84.22	31	27	130	All= 188		
12.07 *	agreeing	2.64	87.95	10	10	63	Supreme management= 83	Specialists use blocks chain to discover and describe hacking	20
	to a certain degree	2.00	66.67	6	6	6	Middle management= 16		
	to a certain degree	2.33	77.53	22	51	51	Executive management= 89		
79.19	agreeing	2.44	81.21	38	120	120	All= 188		
14.45 *	agreeing	2.69	89.56	8	65	65	Supreme management= 83	There are specialists in observing hacking at time of occurrence and repairing any resulting defect	21
	to a certain degree	2.13	70.83	4	6	6	Middle management= 16		
	agreeing	2.37	79.03	20	53	53	Executive management= 89		
90.4	agreeing	2.49	82.98	32	124	124	All= 188		

From table (10) there are significant differences between the research group responses on all statements as chi square ranged between (10.58*: 14.45*) with an outweighed percentage (81.21: 84.22)

Fatma Elsebaey (2019), Ehab Khalifa (2018) (22) mention that blue kitchen techniques has 2 main norms, non-centralism and international transparency in managing all deals (15: 4)

The researcher considers the need to work on holding introductory courses for workers in sports clubs to learn about blockchain technology and how to deal with this technology and to urge its application and adoption because of its benefits in preserving data integrity and protecting

information.

Table (11) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Third Dimension: Digital Techniques) (D – Open Governmental Data)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
7.42	agreeing	2.53	84.34	13	13	57	Supreme management= 83	Open governmental data are used in developing the club's administrative performance via providing the content with club's service related data	22
	to a certain degree	2.06	68.75	7	1	8	Middle management= 16		
	agreeing	2.35	78.28	21	16	52	Executive management= 89		
71.63	agreeing	2.40	80.14	41	30	117	All= 188		
8.22	agreeing	2.52	83.94	12	16	55	Supreme management= 83	The club profits from open governmental data in statistical analysis for a certain subject	23
	to a certain degree	2.00	66.67	7	2	7	Middle management= 16		
	to a certain degree	2.28	76.03	24	16	49	Executive management= 89		
56.56	agreeing	2.36	78.72	43	34	111	All= 188		
7.46	agreeing	2.63	87.55	11	9	63	Supreme management= 83	Technical and technological structure of sites availing open data are not enough	24
	to a certain degree	2.06	86.75	6	3	7	Middle management= 16		
	agreeing	2.47	82.40	17	13	59	Executive management= 89		
105.79	agreeing	2.51	83.51	34	25	129	All= 188		
6.79	agreeing	2.54	84.74	14	10	59	Supreme management= 83	Legal restrictions and confident information limit profiting from and reuse	25
	to a certain degree	2.00	66.67	6	4	6	Middle management= 16		
	agreeing	2.42	80.52	20	12	57	Executive management= 89		
85.83	agreeing	2.44	81.21	40	26	122	All= 188		
								The club profits from data provided by	26
8.28	agreeing	2.65	88.35	12	5	66	Supreme management= 83	Ministries and authorities site	26/1
	to a certain degree	2.13	70.83	6	2	8	Middle management= 16		
	agreeing	2.51	83.52	16	12	61	Executive management= 89		
127.03	agreeing	2.54	84.557	34	19	135	All= 188		
10.78 *	agreeing	2.61	87.15	11	10	62	Supreme management= 83	Statistical central authority	26/2
	sometimes	1.94	64.58	7	3	6	Middle management= 16		
	agreeing	2.49	83.15	15	15	59	Executive management= 89		
99.27	agreeing	2.50	83.33	33	28	127	All= 188		
13.45 *	agreeing	2.66	88.76	13	2	68	Supreme management= 83	Sports leagues sites	26/3
	to a certain degree	2.13	70.83	6	2	8	Middle management= 16		

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
137.88	agreeing	2.54	84.64	14	13	62	Executive management= 89		
	agreeing	2.56	85.28	33	17	138	All= 188		
6.32	agreeing	2.54	84.74	15	8	60	Supreme management= 83	Olympic committees sites	26/4
	to a certain degree	2.06	68.75	6	3	7	Middle management= 16		
	agreeing	2.51	83.52	15	14	60	Executive management= 89		
100.03	agreeing	2.48	82.80	36	25	127	All= 188		

From table (11) there are differences between research groups responses to statements numbers (26/2, 26/3) as chi square reached (10.87*), (13.45*) and outweighed percentage (83.33), (85.28) respectively.

As the sample opinions agreed upon statements numbers (22, 23, 24, 25, 26/1, 26/4) as chi square ranged between (6.32 : 8.28) and outweighed percentage (78.72 : 84.57)

The results of **Khulud Bint Salem Bin Saleh (2019) (24)** indicate that open governmental data must be integrated, compiled at the highest level of accuracy, and available to the largest number of users and for the broadest range of purposes without distinction of anyone and without registration conditions, and is not subject to any copyright, patents or trademarks, with easy and quick access to it in a timely manner to preserve its value.

Haroun Abdalla (2009) (19) mentions that creating a data base is the basis of governmental entrance to internet to provide people and investors with the latest information.

The researcher believes that it is necessary to develop and upgrade government databases and establish central repositories for information, considering a specific policy for informational security in accordance to international standards in this regard.

Table (12) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Third Dimension: Digital Techniques) (E- Artificial Intelligence)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
								Artificial intelligence is used by clubs in	27
8.39	agreeing	2.65	88.35	10	9	64	Supreme management= 83	Discovering talents and expecting and developing talented to make sports champions	27/1
	to a certain degree	2.06	68.75	6	3	7	Middle management= 16		
	agreeing	2.47	82.40	17	13	59	Executive management= 89		
109.03	agreeing	2.52	83.87	33	25	130	All= 188		
14.50 *	agreeing	2.65	88.35	11	7	65	Supreme management= 83	Developing and improving athletes	27/2

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
102.68	to a certain degree	2.06	68.75	7	1	8	Middle management= 16	performance level by analyzing as great data of players and teams performance as possible	
	agreeing	2.44	81.27	16	18	55	Executive management= 89		
	agreeing	2.50	83.33	34	26	128	All= 188		
9.86 *	agreeing	2.42	80.72	18	12	53	Supreme management= 83	Shooting scenes with angle 360° for sports activities details of participants' faces ,movements and acts	27/3
	to a certain degree	1.88	62.50	8	2	6	Middle management= 16		
	to a certain degree	2.19	73.03	25	22	42	Executive management= 89		
36.79	to a certain degree	2.27	75.53	51	36	101	All= 188		
15.22 *	agreeing	2.41	80.32	21	7	55	Supreme management= 83	Producing press reports and videos clarifying facts occurred during different activities	27/4
	to a certain degree	1.75	58.33	9	2	5	Middle management= 16		
	to a certain degree	2.29	76.40	21	21	47	Executive management= 89		
50.56	to a certain degree	2.30	76.60	51	30	107	All= 188		

From table (12) there are differences between the research groups responses to all statements except for statement number (37/1) as chi ranged between (9.86*: 15.22*) with an outweighed percentage (75.53: 83.33).

The results of **Salma Kunde (2018) (38)** study indicate that the sports field has benefited greatly from information technology, represented by the emergence of new techniques to explain sports movements, the development of presentation methods, and the increase in the use of computers in reaching modern methods that enable a successfully manage of sport activity.

Studies of Salma Konda (2018) (38), Abia Zaian (2016) (3) indicates that sports field profited from information technology via emergence of new techniques of illustrating sports activities and developing display methods.

Faisal Elmala (2019) mentions that international trials proved the ability of artificial intelligence to develop and improve sports performance level via analyzing as most great data as possible of players and teams. (69)

The researcher believes that it is necessary to activate the digital transformation system by introducing artificial intelligence applications within sports clubs by developing a future plan to electronically transfer all the services provided by the club, thus achieving a competitive advantage for sports clubs.

Table (13) First Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Third Dimension: Digital Techniques) (F- Robotic Process Automation)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
The club uses robot operations to add functional advantages represented in									28
8.93	agreeing	2.71	90.36	9	6	68	Supreme management= 83	Managing payrolls and compensations registration	28/1
	to a certain degree	2.13	70.83	6	2	8	Middle management= 16		
	agreeing	2.48	82.77	19	8	62	Executive management= 89		
138.43	agreeing	2.55	85.11	34	16	138	All= 188		
6.07	agreeing	2.64	87.95	11	8	64	Supreme management= 83	Managing the club's employees data	28/2
	to a certain degree	2.19	72.92	5	3	8	Middle management= 16		
	agreeing	2.43	80.90	20	11	58	Executive management= 89		
110.09	agreeing	2.50	83.33	36	22	130	All= 188		
13.20 *	agreeing	2.66	88.76	10	8	65	Supreme management= 83	Identifying credit and debit accounts	28/3
	to a certain degree	2.06	68.75	6	3	7	Middle management= 16		
	to a certain degree	2.31	77.15	22	17	50	Executive management= 89		
85.06	agreeing	2.45	81.56	38	28	122	All= 188		
16.08 *	agreeing	2.61	87.15	11	10	62	Supreme management= 83	Looking into the members' complaints	28/4
	to a certain degree	1.88	62.50	7	4	5	Middle management= 16		
	to a certain degree	2.25	74.91	24	19	46	Executive management= 89		
61.29	agreeing	2.38	79.26	42	33	113	All= 188		
13.59 *	agreeing	2.69	89.56	9	8	66	Supreme management= 83	Managing the club's members subscription renewal	28/5
	to a certain degree	2.06	68.75	7	1	8	Middle management= 16		
	agreeing	2.37	79.03	21	14	54	Executive management= 89		
103.73	agreeing	2.48	82.80	37	23	128	All= 188		

From table (13) and the figure there are differences between the research groups' responses to statements numbers (28/3, 28/4, 28/5) as chi square ranged between (13.20*: 16.08*) and outweighed percentage ranged between (79.26: 82.80).

Also, the research sample opinion agreed on statements numbers (28/1, 28/2) as chi square reached (8.93), (6.07) with an outweighed percentage (85.11), (83.33) respectively.

Mohit Sharma (2018) states that robotic process automation (RPA) solutions are typically

implemented in organizations that typically depend on human resources extensively for large-scale, interactive, and repetitive operations. The key processes best suited to robotic process automation tend to be extensively based on data entry, comparisons and validation. (55:10).

Abdelarahman Elour (2018) stated that to guarantee successful execution of robot operations automation through profiting from automatic control increase, the organizations shall identify and redesign their current operations. (1: 4)

The researcher believes that additional robotic process automations can be used within sports clubs to conduct sensitive operations without human intervention at small costs, and to restructure human resources with work requirements, including evaluation work and rewards for workers in the affected areas.

Table (14) Second Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (First Dimension: E. Commerce)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
								Using ecommerce by the club plays a great role in	29
10.83 *	agreeing	2.70	89.96	8	9	66	Supreme management= 83	Achieving a competitive advantage for beneficiaries service	29/1
	agreeing	2.38	79.17	4	2	10	Middle management= 16		
	agreeing	2.45	81.65	13	23	53	Executive management= 89		
105.97	agreeing	2.55	85.11	25	34	129	All= 188		
17.87 *	agreeing	2.69	89.56	8	10	65	Supreme management= 83	Facilitating commercial deals	29/2
	to a certain degree	2.13	70.83	6	2	8	Middle management= 16		
	agreeing	2.44	81.27	12	26	51	Executive management= 89		
91.19	agreeing	2.52	84.04	26	38	124	All= 188		
12.82 *	agreeing	2.63	87.55	10	11	62	Supreme management= 83	Reducing the club's expenses	29/3
	to a certain degree	1.94	64.58	6	5	5	Middle management= 16		
	agreeing	2.44	81.27	15	20	54	Executive management= 89		
81.65	agreeing	2.48	82.62	31	36	121	All= 188		
13.94 *	agreeing	2.48	82.73	16	11	56	Supreme management= 83	The club provides e. payment service to facilitate payment and reducing cash collection corruption	30
	to a certain degree	1.69	56.25	8	5	3	Middle management= 16		
	agreeing	2.37	79.03	19	18	52	Executive management= 89		
56.56	agreeing	2.36	78.72	43	34	111	All= 188		
13.75 *	agreeing	2.64	87.95	10	10	63	Supreme management= 83	There is an attitude towards mechanizing joining championships and academies to	31
	to a certain degree	1.88	62.50	7	4	5	Middle management= 16		

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
87.33	agreeing	2.42	80.52	18	16	55	Executive management= 89	facilitate counting practices and creating good data bases	
	agreeing	2.47	82.27	35	30	123	All= 188		
14.71 *	agreeing	2.59	86.35	11	12	60	Supreme management= 83	The club registers sports organizations and obtains registration codes as per international specifications of organizations and playgrounds	32
	to a certain degree	1.88	62.50	6	6	4	Middle management= 16		
	to a certain degree	2.31	77.15	20	21	48	Executive management= 89		
58.29	agreeing	2.40	79.96	37	39	112	All= 188		
14.27 *	agreeing	2.59	86.35	13	8	62	Supreme management= 83	Creating a digital data base according to which organizations, their place and types are selected	33
	to a certain degree	2.06	68.75	5	5	6	Middle management= 16		
	to a certain degree	2.28	76.03	21	22	46	Executive management= 89		
63.20	agreeing	2.40	79.96	39	35	114	All= 188		
11.75 *	agreeing	2.46	81.93	17	11	55	Supreme management= 83	E. control via system disallowing registration unless legally , accordingly pinpointing and dealing with violations	34
	to a certain degree	1.88	62.50	7	4	5	Middle management= 16		
	to a certain degree	2.27	75.66	20	25	44	Executive management= 89		
41.02	to a certain degree	2.32	77.30	44	40	104	All= 188		
								Digital transformation supports the club administrative review via:	35
7.13	agreeing	2.71	90.39	8	8	67	Supreme management= 83	Rationalizing administrative decisions	35/1
	to a certain degree	2.31	77.08	4	3	9	Middle management= 16		
	agreeing	2.46	82.02	17	14	58	Executive management= 89		
121.93	agreeing	2.56	85.25	29	25	134	All= 188		
12.30 *	agreeing	2.71	90.36	8	8	67	Supreme management= 83	Supporting internal control system	35/2
	to a certain degree	2.25	75.00	4	4	8	Middle management= 16		
	agreeing	2.36	78.65	20	17	52	Executive management= 89		
99.14	agreeing	2.51	83.51	32	29	127	All= 188		
12.22 *	agreeing	2.69	89.56	8	10	65	Supreme management= 83	Verifying observing the planned administrative policies	35/3
	to a certain degree	2.19	72.92	4	5	7	Middle management= 16		
	agreeing	2.36	78.65	19	19	51	Executive management= 89		
87.20	agreeing	2.49	82.98	31	34	123	All= 188		
10.31 *	agreeing	2.70	89.96	8	9	66	Supreme management= 83	Verifying the financial reports true information	35/4
	to a certain degree	2.25	75.00	4	4	8	Middle management= 16		
	agreeing	2.93	79.78	18	18	53	Executive management= 89		

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
99.07	agreeing	2.52	83.87	30	31	127	All= 188		
12.24 *	agreeing	2.63	87.55	10	11	62	Supreme management= 83	Evaluating the club' s employees performance	35/5
	sometimes	2.00	66.67	6	4	6	Middle management= 16		
	sometimes	2.33	77.53	20	20	49	Executive management= 89		
70.67	agreeing	2.43	81.03	36	35	117	All= 188		
								E. accounting systems suitable data about	36
11.82 *	agreeing	2.67	89.16	9	9	65	Supreme management= 83	The net club's profit	36/1
	to a certain degree	2.06	68.75	5	5	6	Middle management= 16		
	agreeing	2.44	81.27	18	14	57	Executive management= 89		
102.30	agreeing	2.51	83.69	32	28	128	All= 188		
13.54 *	agreeing	2.69	89.56	9	8	66	Supreme management= 83	Average investment return	36/2
	to a certain degree	2.00	66.67	6	4	6	Middle management= 16		
	agreeing	2.40	80.15	19	15	55	Executive management= 89		
99.46	agreeing	2.49	83.16	34	27	127	All= 188		
14.57 *	agreeing	2.65	88.35	10	9	64	Supreme management= 83	Declared liquid money percentage	36/3
	to a certain degree	1.88	62.50	7	4	5	Middle management= 16		
	agreeing	2.44	81.27	17	16	56	Executive management= 89		
93.20	agreeing	2.48	82.80	34	29	125	All= 188		

From table (14) there are significant differences the research sample groups' responses for all the dimensions statements as chi square ranged between (10.31* : 17.87*) and outweighed percentage ranged between (77.30 : 85.11), except for statement number (35/1) as chi square reached (7.13).

Results of study of Omar Khalaf (2019) (32), Ahmed Adam (2014) (5) indicate that using information technology in administrative business is the aim of all organization to achieve the competitive advantage.

Nigm Aboud Nigm (2004) states e. control advantages, as permanent control is achieved instead of periodic control; and by time, reduces the importance of control depending on inputs, processes or activities in the interest of increasing results assurance (31 : 247).

The researcher concludes that the shift towards electronic commerce has become a necessary and vital matter, and therefore club administrations should bear this in mind in setting the club's marketing strategies, in order to reduce advertising and advertising costs, and facilitate the beneficiaries' acquaintance with the specifications of the services provided by the club, thus

achieving a competitive advantage among different sports clubs.

Table (15) Second Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Second Dimension: E. Marketing) (A- The Club' Website)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
4.31	agreeing	2.69	89.56	8	10	65	Supreme management= 83	The club has a website in Arabic and English to facilitate dealing with and access to	37
	to a certain degree	2.31	77.08	4	3	9	Middle management= 16		
	agreeing	2.55	85.02	13	14	62	Executive management= 89		
128.76	agreeing	2.59	86.35	25	27	136	All= 188		
6.20	agreeing	2.71	90.63	8	8	67	Supreme management= 83	The club's website is characterized by easy use	38
	to a certain degree	2.31	77.08	4	3	9	Middle management= 16		
	agreeing	2.51	83.52	15	14	60	Executive management= 89		
128.76	agreeing	2.58	85.99	27	25	136	All= 188		
6.47	agreeing	2.65	88.35	8	13	62	Supreme management= 83	The club's page includes a description of services and activities provided with pictures	39
	to a certain degree	2.19	72.92	5	3	8	Middle management= 16		
	agreeing	2.46	82.02	17	14	58	Executive management= 89		
102.17	agreeing	2.52	84.04	30	30	128	All= 188		
9.17	agreeing	2.66	88.76	8	12	63	Supreme management= 83	The club tops the first search engine pages	40
	to a certain degree	2.06	68.75	6	3	7	Middle management= 16		
	agreeing	2.52	83.90	15	13	61	Executive management= 89		
11.78	agreeing	2.54	84.75	29	28	131	All= 188		
12.30 *	agreeing	2.66	88.76	9	10	64	Supreme management= 83	The club updates information periodically on website	41
	to a certain degree	2.00	66.67	7	2	7	Middle management= 16		
	agreeing	2.46	82.02	16	16	57	Executive management= 89		
102.30	agreeing	2.51	83.69	32	28	128	All= 188		
11.55 *	agreeing	2.70	89.96	8	9	66	Supreme management= 83	Words used on the club's website are studied carefully by a specialized department	42
	to a certain degree	2.13	70.83	6	2	8	Middle management= 16		
	agreeing	2.42	80.25	18	16	55	Executive management= 89		
105.52	agreeing	2.52	83.87	32	27	129	All= 188		
14.14 *	agreeing	2.69	89.56	8	10	65	Supreme management= 83	The club has many specialists of developing the club's website	43
	to a certain degree	1.94	64.58	7	3	6	Middle management= 16		
	agreeing	2.49	83.15	15	15	59	Executive management= 89		
108.55	agreeing	2.53	84.40	30	28	130	All= 188		

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
19.78 *	agreeing	2.63	87.55	10	11	62	Supreme management= 83	There are financial appropriations allocated for searching and developing the website	44
	to a certain degree	1.75	58.33	9	2	5	Middle management= 16		
	agreeing	2.36	78.65	19	19	51	Executive management= 89		
73.57	agreeing	2.43	80.85	38	32	118	All= 188		
15.49 *	agreeing	2.66	88.76	8	12	63	Supreme management= 83	There is an icon of direct communication via the website to provide the direct support to the club's beneficiaries	45
	to a certain degree	1.75	58.33	7	3	5	Middle management= 16		
	agreeing	2.40	80.15	17	19	53	Executive management= 89		
82.42	agreeing	2.46	82.09	32	34	121	All= 188		
17.60 *	agreeing	2.54	84.74	11	16	56	Supreme management= 83	Enabling beneficiaries to update their data electronically via the club's website	46
	to a certain degree	1.69	56.25	9	3	4	Middle management= 16		
	agreeing	2.40	80.15	16	21	52	Executive management= 89		
58.38	agreeing	2.40	80.14	36	40	112	All= 188		
15.94 *	agreeing	2.66	88.76	9	10	64	Supreme management= 83	The club focuses on preparing the page followers , number of visits and causes of their increase or decrease	47
	to a certain degree	1.81	60.42	8	3	5	Middle management= 16		
	agreeing	2.46	82.02	19	10	60	Executive management= 89		
106.67	agreeing	2.49	83.16	36	23	129	All= 188		
17.19 *	agreeing	2.58	85.94	11	13	59	Supreme management= 83	Matches tickets are offered on the club's website in conformity with the event importance and preparing the expected visitors	48
	to a certain degree	1.69	56.25	9	3	4	Middle management= 16		
	agreeing	2.45	81.65	17	15	57	Executive management= 89		
78.97	agreeing	2.44	81.38	37	31	120	All= 188		

From table (15) there are research samples groups' opinions agreement on statements numbers (37, 38, 39, 40) as chi square reached (4.31 : 9.17) with an outweighed percentage (84.04 : 86.35).

Results of study of Zahef Mohamed (2018) (43) indicate sports organizations' keenness to availing a website and allocating an enough budget to develop e. marketing

Mohamed Ramadan (2006) clarifies that e. marketing provides the profit of investing and managing time for beneficiaries via quick searching for activities and services (28: 126).

Also from the above table, it is clear that the research sample opinions disagree on statements number (41: 48) as chi square reached (11.55*: 19.78*) with an outweighed percentage (70.85: 84.40)

The results of the study of Saad Ahmed Shalaby and Abd Al-Taif Bukhara (2008) (35) indicate that most German clubs take into account the design of their web pages to ensure the management and marketing of their services to various target groups via the Internet.

Results of study of Haitham Fayeze (2016) (17) proves no budget allocated for e. marketing and

discouraging using new e. marketing means for sports activities.

The researcher concludes that the application of electronic marketing to sports clubs requires the availability of specialized human resources with the skills and qualifications that enable them to develop the club's website, with the allocation of a sufficient budget to develop its marketing activity.

Table (16) Second Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Second Dimension: E. Marketing) (B- the Club's E. Mail)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
11.11 *	agreeing	2.58	85.94	12	11	60	Supreme management= 83	The club has mail addresses to be used in correspondences	49
	to a certain degree	2.00	66.67	7	2	7	Middle management= 16		
	to a certain degree	2.33	77.53	20	20	49	Executive management= 89		
68.37	agreeing	2.41	80.32	39	33	116	All= 188		
12.97 *	agreeing	2.54	84.74	13	12	58	Supreme management= 83	Approving the email as an official method of correspondences to get rid of documentary cycle	50
	to a certain degree	1.88	62.50	8	2	6	Middle management= 16		
	to a certain degree	2.29	76.40	21	21	47	Executive management= 89		
56.31	agreeing	2.37	78.90	42	35	111	All= 188		
12.69 *	agreeing	2.57	85.54	14	8	61	Supreme management= 83	The club uses the email to answer the beneficiaries questions	51
	to a certain degree	1.94	64.58	7	3	6	Middle management= 16		
	agreeing	2.35	78.28	19	20	50	Executive management= 89		
71.31	agreeing	2.41	80.352	40	31	117	All= 188		
17.56 *	agreeing	2.65	88.35	9	11	63	Supreme management= 83	The beneficiaries are answered quickly to save time and effort	52
	to a certain degree	1.81	60.42	8	3	5	Middle management= 16		
	agreeing	2.35	78.28	20	18	51	Executive management= 89		
76.16	agreeing	2.44	81.21	37	32	119	All= 188		
17.10 *	agreeing	2.53	84.34	11	17	55	Supreme management= 83	There is a team specialized in answering the beneficiaries' questions via email	53
	to a certain degree	1.75	58.33	9	2	5	Middle management= 16		
	to a certain degree	2.22	74.16	23	23	43	Executive management= 89		
38.95	to a certain degree	2.32	77.30	43	42	103	All= 188		
14.95 *	agreeing	2.61	87.15	10	12	61	Supreme management= 83	Marketing fliers are sent to the club's beneficiaries via email	54
	to a certain degree	1.94	64.58	7	3	6	Middle management= 16		
	to a certain degree	2.24	74.53	24	20	45	Executive management= 89		
58.54	agreeing	2.38	79.26	41	35	112	All= 188		

From table (16), there are significant differences between responses of all the research sample

groups as chi square reached (11.11*: 17.56*) with an outweighed percentage (77.30: 81.21).

Study of Hind Elghanem (2014) (20) states that the ability of dealing with beneficiaries via email is one of the most important things introduced by knowledge and organizations digital transformation.

The researcher believes that the ability to deal with beneficiaries via e-mail and social networking services is one of the most important things that knowledge and digital transformation can provide to sports clubs in the field of receiving and responding to beneficiaries' inquiries and questions.

**Table (17) Second Dimension Result: E. Marketing
(C- Applications of Smart Phones and Social Media)**

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
8.99	agreeing	2.49	83.13	13	16	54	Supreme management= 83	The club has smart phone applications helping beneficiaries to communicate permanently with the club	55
	to a certain degree	1.94	64.58	7	3	6	Middle management= 16		
	to a certain degree	2.25	74.91	22	23	44	Executive management= 89		
40.89	to a certain degree	2.33	77.66	42	42	104	All= 188		
5.42	agreeing	2.73	91.16	8	6	69	Supreme management= 83	The club uses social media to advertise services provided to beneficiaries	56
	to a certain degree	2.31	77.08	5	1	10	Middle management= 16		
	agreeing	2.63	87.64	13	7	69	Executive management= 89		
175.45	agreeing	2.65	88.30	26	14	148	All= 188		
10.35 *	agreeing	2.69	89.56	10	6	67	Supreme management= 83	The club studies the beneficiaries e. comments to know the offered services advantages and disadvantages	57
	to a certain degree	2.19	82.92	6	1	9	Middle management= 16		
	agreeing	2.46	82.02	17	14	58	Executive management= 89		
122.95	agreeing	2.54	84.57	33	21	134	All= 188		
8.09	agreeing	2.72	90.76	8	7	68	Supreme management= 83	Answering e. comments may give beneficiaries good impression	58
	to a certain degree	2.25	75.00	5	2	9	Middle management= 16		
	agreeing	2.55	85.02	13	14	62	Executive management= 89		
139.54	agreeing	2.60	86.70	26	23	139	All= 188		
5.32	agreeing	2.48	82.73	15	13	55	Supreme management= 83	The club allows using sports facilities such as halls and basins and leasing the same via smart applications	59
	to a certain degree	2.00	66.67	6	4	6	Middle management= 16		
	agreeing	2.46	82.02	16	16	57	Executive management= 89		
73.41	agreeing	2.43	81.03	37	33	118	All= 188		
13.06 *	agreeing	2.64	87.95	8	14	61	Supreme management= 83	The club enhances its promotional campaigns via face book through	60
	to a certain degree	2.06	68.75	7	1	8	Middle management= 16		

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
	agreeing	2.58	86.14	12	13	64	Executive management= 89	supporting by pictures and videos	
118.41	agreeing	2.56	85.46	27	28	133	All= 188		
8.85	agreeing	2.53	84.34	12	15	56	Supreme management= 83	The club has a system of sending SMS on smart phones	61
	to a certain degree	2.00	66.67	7	2	7	Middle management= 16		
	agreeing	2.53	84.27	13	16	60	Executive management= 89		
87.14	agreeing	2.48	82.80	32	33	123	All= 188		

From table (17) the research sample opinions agree upon statements numbers (55, 56, 58, 59, 61) as chi square ranged between (5.32 : 8.85) with an outweighed percentage (77.66 : 88.30)

Study of Moustafa Kawal (2018) (39) indicates the importance of using the phone application in attracting clients as they enable the organization to increase its works and reduce commercial costs.

Foad Bougnana (2008) (16) mentions the importance of using email and SMS.

Also table proves the research group's opinion disagreement on the statements number (57, 60) as chi square reached (10.35*), (13.06*) with an outweighed percentage (84.75), (85.46) respectively.

Results of study of Mariam Nariman (2012) (26) prove that social media marketing is very important for consumer in pre purchase stage as many service information are available.

The results of the study of Mariam Nariman Nomar (2012) (26) indicate that marketing through social networking sites such as Facebook is of great importance to the consumer in the pre-purchase stage, where there is a lot of information available about services, their characteristics, features and prices.

The researcher believes that social networking sites have become a means accessible to various groups of society, as these sites have multiplied and are distinguished by their availability and permanent adhesion to the beneficiaries, and they are of great importance for sports clubs because of their effective role in appealing to the beneficiaries of the services provided by sports clubs.

Table (18) Second Factor Results: Digital Transformation Requirements to Achieve the Best Competitive Advantage at Clubs (Second Dimension: E. Marketing) (D- E. Newspapers and digital transmission stages)

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
7.14	agreeing	2.60	86.75	10	13	60	Supreme management= 83	The club has a you tube channel to transmit pictures and videos about the club's activities	62
	to a certain degree	2.13	70.83	6	2	8	Middle management= 16		
	agreeing	2.57	85.77	12	14	63	Executive management= 89		
111.78	agreeing	2.55	84.93	28	29	131	All= 188		
8.51	agreeing	2.52	83.94	13	14	56	Supreme management= 83	The club contracts with	63

Chi square	Attitude	Average	Out weighted percentage	Disagreeing	To a certain degree	Agreeing	Departments	Statement content	S
65.76	to a certain degree	1.88	62.50	7	4	5	Middle management= 16	e. newspapers and magazines as a method of propaganda and advertisement	
	agreeing	2.39	79.78	19	16	54	Executive management= 89		
	agreeing	2.40	80.14	39	34	115	All= 188		
17.97 *	agreeing	2.61	87.15	10	12	61	Supreme management= 83	The club contracts with digital transmission stages to display events and matches against financial return	64
	to a certain degree	1.81	60.42	7	5	4	Middle management= 16		
	agreeing	2.45	81.65	29	18	51	Executive management= 89		
62.04	agreeing	2.47	82.27	46	35	116	All= 188		
17.78*	agreeing	2.63	87.55	9	13	61	Supreme management= 83	The club shall compile special conditions with digital transmission stages when covering and transmitting matches and championships	65
	to a certain degree	1.75	58.33	8	4	4	Middle management= 16		
	agreeing	2.38	79.40	18	19	52	Executive management= 89		
70.67	agreeing	2.44	81.21	35	36	117	All= 188		

From table (18), it is clear that the research sample agree upon statements number (62, 63) as chi square reached (7.14), (8.51) with outweighed percentage (84.93) (80.14) respectively.

Study of Bosaina Ghadiri (2015) (11) indicates the effect of e advertising on beneficiaries under the increasing number of internet users with focusing on advertisement content and credibility.

Also the research sample opinions disagreed on statements numbers (64, 65) as chi square reached (17.97*), (17.78*) with outweighed percentage (82.27), (81.21)

The united company of advertising services established watch at forum which declared reaching the exclusive digital rights at Egyptian series for 4 years, which enables the forum users to enjoy all goals, matches and summaries (70).

The researcher believes that sports club administrations need to pay attention to enhancing their financial returns by attracting digital broadcasting platforms towards obtaining the rights to broadcast their sporting events, especially in light of the decline of traditional broadcasting channels.

Conclusions:

- The supreme management supports digital transformation via looking into new techniques by documenting services and trying to transform paper forms to electronic forms.
- Employees are neither trained nor provide with skills needed for attending technology permanently.
- The club's organizational structure agrees with digital transformation application requirements.
- Lack of specialized committee or unit for applying digital transformation as planned.
- Employees have no advanced digital skills such as networks management, ability to create in using digital techniques , developing digital content and computerized programming.
- Weak protection programs related to anti hacking

- The club profits from open governmental data in developing the club's performance data.
- Artificial intelligence is, to a certain degree, at clubs to develop the athletes' level.
- Ecommerce is weakly used in facilitating commercial deals.
- The club has a web site in English and Arabic and the club's page has a service and activities description.
- Law financial appropriations allocated for research and developing website.

Recommendations:

- Finishing the national project of digital transformation considered as an important tool of achieving permanent development, developing governmental work development, providing e services and applying digital economy.
- Developing legislative frames supporting digital transformation and trying to make Egypt distinctive on great data centers manufacturing chart to be a territorial centre for data centers and information banks.
- Compiling an integrated strategy to develop human resources in conformity with achieving permanent and integrated community development in conformity with the aimed digital transformation to attend international changes and new updates.
- Clubs should adopt a clear strategy towards a digital transformation and preparing a time table for applying transformation to guarantee execution in conformity with Egypt view 2030.
- Respond to beneficiaries via developing participation channels, and activating beneficiaries, participation in developing and improving the club's decisions, policies and services.

Bibliography

First: Arabic Bibliography

- 1 **Abdelrahman Elour (2018)** : Human resources impact , routine operations and their effect on work future, federal authority of governmental human resources , issue 8 , United Arab Emirates
- 2 **Abdelsabour Abdelkawy Elmasry (2010)** : Ecommerce and Law , Dar Al Elom Publishers , Cairo
- 3 **Abla Zaian Bouzian (2016)** : The effect of using some technologies in developing decision making level for handball referees, unpublished master thesis , institute of physical and sports science and techniques , al gibali bonama university , Algergia
- 4 **Ahlam Elfekky (2014)** : Information and Communication Technology and its Role in Developing Sports Management, an Unpublished Master Thesis, Faculty of Post Graduate Studies for Physical Education, Sudan University for Science and Technology.

- 5 **Ahmed Adam Ahmed Mohamed (2014)** : Information Technology Role in Improving Sports Management Performance in Some Governmental and Nongovernmental Organizations a Thesis Published on Magazine of Faculty of Physical Education, January issue , Sudan University for Science and Technology.
- 6 **Ahmed Mahgoub Mousa (2015)** : The Effect of Computerization on Achieving E-government Purposes, Faculty of Post Graduate Studies, Al Nilin University, Sudan.
- 7 **Ahmed Mohamed Ghounim (2004)** : E-management, Fields of Present and Expectation of Future , the Modern Library , Saudi Arabia
- 8 **Ala Abdelmonim Abdalla (2014)** : Creating and developing applications to avail the same as a cloud service , faculty of commuter science and information techniques, Al Nilin University , Sudan
- 9 **Ashour Abdelkerim (2010)** : The role e. Management in rationalizing public service in the US and Algeria, un published master thesis , faculty of law and political science , Mantori University , Algeria
- 10 **Beshir Arnous (2007)** : Artificial Intelligence, Alsaheb Publishers, Cairo
- 11 **Bosaina Ghadiri (2015)** : E. Advertisement in Directing the Consumer's Behavior, Faculty of Economic Science, Commercial Science and Facilitation Science, Al Arabi Ben Mehidi University, Algeria
- 12 **Dina Mohamed Adel Abdelaziz (2016)** : The Role of e. Management in Achieving the Competitive Advantage at Clubs, a thesis published on Al Elmia Magazine of Physical Education, Faculty of Physical Education for Girls, Alexandria University, volume 5 issue 5.
- 13 **Doaa Elhosban, Weam Elhayek (2017)** : Challenges and Opportunities Affecting E. Government Success in Jordon, a thesis published on science, Engineering and Information Technology Magazine, first volume, issue 2, National Research Center, Palestine.
- 14 **Faleh Abbas Lotfy (2019)** : The effect of artificial intelligence on auditing quality of accounting auditing offices in Jordon , unpublished master thesis, faculty of scientific research deanship and post graduate studies , Girsh university , Jordon
- 15 **Fatma Elsabiy (2019)** : Studying strategies of attitudes of applying blue kitchen technique in Gulf states , al Bahrain center for strategic and international studies , Bahrain

- 16 **Foad Abougnana (2008)** : Evaluating marketing communication fact in service organizations, unpublished master thesis, faculty of facilitation sciences, Warkala university, Algeria
- 17 **Haitham Fayez Mahmoud (2016)** : E. Sports Marketing Strategy at Sports Clubs in Egypt. unpublished doctorate thesis, Faculty of Physical Education, Alexandria University
- 18 **Hanin Abdelsalam Abou Oud, Aseel Ahmed Eldarat, Aly Mohamed Abdelshahid (2019)** : Intelligence Things Internet in the Field of Health Care, issue 15, Academic Research Magazine
- 19 **Haroun Abdalla Eissa (2009)** : Designing a System for Human Development in States in the Frame of the E. Government's Project by Using Open Resources, unpublished doctorate thesis, Faculty of Computer Science and Information Technology, Al Nilin University, Sudan
- 20 **Hend Abdelrahman Elghanim (2014)** : Behaviors of Supplicating Information Related to E. Information Bases for Teaching Staff Members, Islamic University of Imam Mohamed Ben Saoud, thesis published on national magazine of King Fahd, volume 20 issue 1
- 21 **Hend Mohamed Hamed (2010)** : Ecommerce in Touristic Field, Faculty of Tourism and Hotels, Helwan University Cairo
- 22 **Ihab Khalifa (2018)** : The Blue Kitchen, the Next Technological Revolution in Finance and Administration, Future for Research and Advanced Studies, issue 3 March 2018, Abo Dhabi, Emirates
- 23 **International Telecommunication Union (2018)** : Creating Abilities in a Changeable Environment for Information and Communication Technology, Communication Development Library, Geneva , Switzerland
- 24 **Kholoud Bent Salem Bin Saleh (2019)** : Using Open Governmental Data by Researchers at Faculties of Human Sciences, Sultan Kabos University, unpublished master thesis, Faculty of Arts and Social Science, Sultan Kabos, Oman
- 25 **Mahmoud Mohamed Ibrahim, Bassma Moharam Elhadad (2018)** : Business Establishment and Digital Transformation, a thesis published on information Egyptian magazine, Egyptian Association for Information System and Accounting Technology , issue (21)

- 26 **Mariam Nariman Noumar (2012)** : Using Social Media and their Effects on Social Relationships "Studying a Sample of Facebook Users in Algeria" unpublished master thesis, Faculty of Media and Communication Science, Al Haj Al Akhdar University, Algeria
- 27 **Mohamed Fathy Abdelhady (2008)** : Knowledge and Libraries Age, first print, High Institute of Culture, Cairo
- 28 **Mohamed Ramadan Zaho (2006)** : Marketing and Advertising Researches from the Perspective of Acts Globalization and Data Electronic, Faculty of Commerce , Banha University, Egypt
- 29 **Moustafa Kawal (2018)** : Suggesting Methods of Sports Promotion to Achieve Self Finance for Algerian Clubs Professionalizing Football, unpublished doctorate thesis, Mohamed Bou Diaf University, Algeria
- 30 **Nawal Bent Aly abdalla (2019)** : Digital Transformation in Oman Sultanate, unpublished master thesis, Faculty of Arts and Social Science, Sultan Kabos University, Oman
- 31 **Negm Aboud Negm (2004)** : E. Management "Strategies, Functions and Problems", Dar ALmarikh, Saudi Arabia
- 32 **Omar Khalaf Salem Elsaleh (2019)** : Factors affecting adopting ecommerce in pharmaceutical companies in Jordon , unpublished master thesis , faculty of economy and administrative science, Al Albit University , Jordon
- 33 **Omar Mohamed Saleh Aly (2018)** : Developing an application by using things internet techniques : by applying to care services , unpublished master thesis, faculty of post graduate studies, Al Nilin University , Sudan
- 34 **Ramadan Aly Elsayed Elmarouf (2011)** : E. Commerce in Japan and How Far Egypt Could Profit From, Jazirat Alward Library, Cairo
- 35 **Saad Ahmed Shalaby, Abdellatif Boukhary (2008)** : Electronic administration and marketing at sports clubs joining the German series of football 2007 2008 , analytical study, a thesis published on the first international conference magazine for physical and health education
- 36 **Safaa Soliman Khalil (2019)** : Developing electronic office systems by using cloud computerizing techniques applying correspondence system , unpublished doctorate thesis ,faculty of computer science and information techniques , Al Nilin University , Sudan

- 37 **Safat Salama, Khalil Abou Koura (2014)** : Robots age challenges and ethics , emirates center of strategic studies and research , Abo Dhabi
- 38 **Salma Kounda (2018)** : Media and communication technology in the field of school management , a thesis published on sports creation magazine, Mohamed Amin Dabaghin university , volume 9, issue 2, Algeria
- 39 **Srour Aly Srour (2005)** : Artificial intelligence , smart systems manual , al marikh publishing house , Riyadh
- 40 **Taweel Osama (2017)** : Electronic management and restrictions of applying to sports management, a field study at youth and sports directorate at al masila state, unpublished master thesis , physical activities science and techniques, Mohamed bo deif
- 41 **United Nation Organization for Education, Science and Culture (2018)** : Skills for Connected World, conceptual memorandum, the Week of Learning by Mobile Appliances, UNESCO
- 42 **Youssef Ahmed Abou Fara (2007)** : E. Marketing Strategies, a behavioral approach, Al Mostakbal Publishing, Oman
- 43 **Zahaf Mohamed (2018)** : E. Marketing as an approach to developing marketing information systems at Algeria sports organizations. A thesis published on sports science magazine, volume 8, issue 24, Masila university, Algeria

Second: Foreign Bibliography

- ٤٤ **Alison Davis, Matthew C. Le Merle (2019)** : Blockchain Competitive Advantage: Whether you are an entrepreneur, investor, or established company, learn how to win the battle for blockchain competitive advantage, Fifth Era Media
- ٤٥ **Bruce Sinclair (2017): IoT Inc** : How Your Company Can Use the Internet of Things to Win in the Outcome Economy, McGraw-Hill Education
- ٤٦ **David Furlonger, Christophe Uzureau (2019)** : The Real Business of Blockchain: How Leaders Can Create Value in a New Digital Age, Harvard Business Review Press
- ٤٧ **George Westerman (2014)** : Leading Digital: Turning Technology into Business Transformation, Harvard Business Review Press
- ٤٨ **Giacomo Veneri and Antonio Capasso (2018)** : Hands-On Industrial Internet of Things: Create a powerful Industrial IoT infrastructure using Industry 4.0, Packt Publishing

- ٤٩ **Gil Gildner, Anya Gildner (2019)** : Becoming a Digital Marketer: Gaining the Hard & Soft Skills for a Tech-Driven Marketing Career, Baltika Press
- ٥٠ **Jared Tate, Andrew Knapp (2019):** : Blockchain 2035: The Digital DNA of Internet 3.0, BlueShed LLC
- ٥١ **Jim Work George Brand (2020)** : E-Commerce Business Model 2020: This Book Includes: Online Marketing Strategies, Dropshipping, Amazon FBA - Step-by-Step Guide with Latest Techniques to Make Money Online and Reach Financial Freedom, Independently published
- ٥٢ **Joel Gurin (2014)** : Open Data Now: The Secret to Hot Startups, Smart Investing, Savvy Marketing, and Fast Innovation, McGraw-Hill Education
- ٥٣ **Julian Singh (2017)** : : Open Data 101: The latest trends, challenges and research in government open data, Cooee Press
- ٥٤ **Kevin L. Jackson and Scott Goessling (2018):** : Architecting Cloud Computing Solutions: Build cloud strategies that align technology and economics while effectively managing risk, Packt Publishing
- ٥٥ **Mohit Sharma (2018)** : How RPA will impact the future workplace for Governments across the world and the economy, Published by the Federal Authority for Government Human Resources, UA E
- ٥٦ **Ovidiu Vermesan, Peter Friess (2013)** : Internet of Things: Converging Technologies for Smart Environments and Integrated Ecosystems, River Publishers
- ٥٧ **Rob Kitchin (2014)** : The Data Revolution: Big Data, Open Data, Data Infrastructures and Their Consequences, SAGE Publications Ltd
- ٥٨ **Sarah Grand-Clement (2017)** : development for a connected world, RAND Europe Digital technology's role in enabling skills
- ٥٩ **Thomas M. Siebel (2019)** : Digital Transformation: Survive and Thrive in an Era of Mass Extinction, Rosetta Books

Third: International Information Network

- 60 <https://www.sis.gov.eg/Story/178669/> : Website of Information Authority – 15 November 2018: The partnership between the government and private sector is a basis of permanent development objectives

- 61 http://www.mcit.gov.eg/Ar/Media_Center/Press_Room/Press_Releases/41556 : Website of Ministry of Communication and Information Technology – Cairo 13 January 2020: Officially , Ministry of Planning Provides Ministry of Communication with Digital Transformation Projects
- 62 <https://www.youm7.com/story/2019/11/22> : website of Al Youm Al Sabei Newspaper 22 November 2019: for the first time Egypt operate a communication satellite to apply digital transformation
- 63 <https://www.elwatannews.com/news/details/4705703> : Website of Alwatan Newspaper 18 April 2020: Sobhy discusses with Microsoft : digital transformation of projects of " youth and sports"
- 64 <https://arabic.sport360.com/article/> : Website of sport 360 – 07 November 2019: Al Ahly Club uncover strategy of digital transformation for all members' services
- 65 <https://www.bneconomy.com/9274> : Site of baladna news economic 03 August 2019: Heliopolis club and Kuwait national bank sign a cooperation protocol of digital transformation of the club in cooperation with Raya systems
- 66 <https://www.elwatannews.com/news/details/1273513> : Alwatan newspaper 23 July 2016: Egypt telecom signing a protocol of cooperation with "Smoha Club"
- 67 <https://www.rosaelyoussef.com/519910> : Website of Ros Al Yossef newspaper 30 December 2019: Dr./ Ahmed Farouk Abdelkader writes: Digital Transformation in Egyptian Sports
- 68 http://www.mcit.gov.eg/Ar/Media_Center/Press_Room/Press_Releases/41556 : Website of Ministry of Communication and Information Technology 13 January 2020: Officially, Ministry of Planning Provides Ministry of Communication with Digital Transformation Projects
- 69 <https://www.alayam.com/Article/sport-article/414326/> : Prof. Dr. / Faisal Elmala, website of alyam newspaper sports field and artificial intelligence
- 70 <https://www.youm7.com/story/2019/5/27/> : Alyom alsabei 27/05/2019, exclusively, the Egyptian serious digitally on Watch iT