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Research Article

The role of competitive intelligence in achieving participatory management within sports organizations

Spor örgütlerinde katılımcı yönetimin sağlanmasında rekabetçi zekânın rolü

Guedri Abdennaceur[1]

[1] PhD Student, Laboratory of modern sciences in physical and sports activities, University of Bouira, Bouira, Algeria, abdennaceur.guedri@gmail.com

ORCID: 0000-0001-7996-2218

Abstract

Competitive intelligence is a process carried out by the institution to acquire, process, and distribute information related to competition and market. Its importance lies in the information and the knowledge collected by the organisation about its competitors.

This study aims to determine the nature of the relationship between competitive intelligence and participatory management. We used a random sample of employees in the Directorate of Youth and Sports Foundation - Tebessa, Estimated at 40 employees, and to collect data, we used the questionnaire and analyzed it through the statistical program SPSS. We found that competitive intelligence provides information and data about the organisation's external environment and keeps it abreast of development, prosperity, and growth. It has an effective role in the process of evaluating competitors and thus reduces competitive surprises. The importance of participatory management lies in allowing employees to develop their skills and talents by facing the management's problems.

Keywords: Competitive Intelligence, Participatory Management, Sports Bodies

Jel Codes: M52, M31, E24

Öz

Rekabet istihbaratı, kurumun rekabet ve pazar ile ilgili bilgileri elde etmek, işlemek ve dağıtmak için yürüttüğü bir süreçtir ve önemi, kuruluşun rakipleri hakkında topladığı bilgi ve bilgilerde yatmaktadır.

Bu çalışma, rekabetçi zeka ve katılımcı yönetim arasındaki ilişkinin doğasını belirlemeyi amaçlamış, Gençlik ve Spor Vakfı Başkanlığı - Tebessa Çalışanlarından rastgele bir örneklem kullanılmıştır - 40 çalışan olarak tahmin edilmektedir ve veri toplamak için anketi kullandık ve SPSS istatistik programı aracılığıyla analiz ettik ve rekabetçi zekanın örgütün dış çevresi hakkında bilgi ve veri sağlamaya katkıda bulunduğu sonucuna ulaştık gelişmeyi, refahı ve büyümeyi yakından takip eder ve rakipleri değerlendirme sürecinde etkili bir role sahiptir ve böylece rekabetçi sürprizleri azaltır ve katılımcı yönetimin önemi, çalışanlara yönetimin karşılaştığı sorunlarla yüzleşme şansı vererek becerilerini ve yeteneklerini geliştirmelerine izin vermektir.

Anahtar Kelimeler: Rekabetçi İstihbarat, Katılımcı Yönetim, Spor Organları

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Introduction

The world has recently witnessed several transformations and changes that included various fields, whether economic, political, social, cultural, or technological, which made contemporary organizations of all kinds face several challenges, such as the universality and intensity of competition, globalization, economic, financial and other crises, which necessitated the need to adapt to the changes taking place and search for the most successful policies and mechanisms to achieve their goals and ensure their continuity and survival in the long term;

Competitive intelligence is a means to get information about competitors, as institutions have become aware of its effective role and find a solution to many problems and obstacles that may affect their March towards excellence and growth, helping them develop long-term strategies.

Suppose sports organisations want to improve their chances in competitive situations. In that case, they must adopt methods and tools that enable them to collect detailed information about competitors and the market systematically and accurately identify the sources through which this information can be obtained to conduct an effective analysis of competitors and then formulate appropriate competitive strategies to respond to the practices of other institutions and address them effectively. Sports organisations also seek to enhance their strength and increase their market share compared to their current and potential competitors so that the sports institution can reach its strategic goals. Competitive intelligence is one of the most important methods and tools institutions can use to view the data and information published by their competitors and collect, store and analyze this data and information, which will increase their knowledge about the market and the prevailing competitive situation. Through its various core dimensions of technological intelligence, alliance intelligence, customer intelligence and competitor intelligence, it will directly affect the improvement of the performance of the sports organization by analyzing the external environment of the sports institution;

The subject of management with participation received the attention of many researchers and specialists in the administrative field on the one hand and the attention of managers and officials of sports institutions on the other hand, as they tended to adopt it in the management process and develop it as much as possible to ensure quality and efficiency in work and one of the most prominent departments that are proactive and supportive of working with the principle of participatory management, we find the Japanese administration, as it contributed to its development and making it a successful model for administrations at the global level;

On the other hand, participatory management is one of the most important administrative methods, especially if it is by the principles of participation in the decision-making process, as this method allows all employees, regardless of their job level, to express their opinions and concerns, which encourages the exchange of knowledge and cooperation in its use, which gives them experience and high professional competencies that contribute to achieving positive results that benefit them and the organization as a whole.

Define search terms

Definition of intelligence

It is the set of mental abilities that an individual uses to face new situations or the ability to understand and perceive the truth and is also expressed as behaviour that results in solving problems, adapting to the environment, forming mental concepts and learning (Eid, 2018, p. 17);

As for Samira Farhat, she believes that intelligence is a divine talent that is specialized in individuals from others, and the individual can develop his mental abilities through experience, experience and continuous work. Intelligence is the use and employment of all innate and acquired cognitive abilities for the development of the human psychological, material and social (Farahat, 2016, p. 72);

It was also defined as a way of thinking that differs and is distinguished from other ways of dealing with matters, events, information and knowledge (Farahat, 2016, p. 73).

Definition of competitive intelligence

Intense competition is not limited to close monitoring of the behaviour of competitors and anticipating their future business but requires classified information that contributes to reading what turns out to be not possible and successful companies rely in the competitive environment on various business strategies to obtain temporary advantages not weakly what distinguishes competitors by maintaining instability in the market, competitive intelligence in the complex and changing business world is a solid base in the field of strategic decision-making Recognizing Competitive needs is the actual beginning of

the competitive intelligence cycle, through which the priorities of the intelligence requirements of the organization are determined to lead the course of the competitive intelligence process in terms of collecting, analyzing and distributing information (Hassan & Bushra, 2019, p. 150);

Cal & Man Dish defined it as a process that involves mobilizing, uploading, and communicating environmental information to aid strategic decision-making (Hassan & Bushra, 2019, p. 152);

Vella and McGongle (Hassan & Bushra, 2019, p. 50) defined it as: "the use of public sources to develop information about the competition, competitors and the market environment";

In the same context, Petersem defined it as: "collecting available information about an organization's competitors and using that information to gain an advantage, where the objectives of competitive intelligence include detecting potential risks and opportunities while being able to react quickly" (Mansouri & Mansouri, 2018, p. 198);

Competitive intelligence differs from industrial espionage, which implies the use of illegal means to collect information, while competitive intelligence is limited to collecting information that is available to all;

Trotta explained that competitive intelligence is the knowledge or information that gives a business organization a competitive advantage at the expense of its opponents and that competitive advantage is obtained through customer relationship management systems that collect information about the behaviour of customers, suppliers, markets and channels, and this type of information gives the organization precedence at the expense of its competitors to provide the products with any person needs, and that information technology helps to create competitive intelligence through the use of information about the currencies entering the business and information about customer behaviour (Al-Shammari, 2011, p. 131);

Wright and Calof defined competitive intelligence as a continuous business development process and an appreciation of the potential and behaviour of current and potential competitors to supplement the monitoring and development processes for competitive advantage (Al-Shammari, 2011, p. 132).

Procedural definition

Competitive intelligence as applicable recommendations arising from a systematic process includes planning, collecting, uploading and disseminating information about the external environment for opportunities or developments; such developments can potentially affect the organization or the competitive situation of a country.

Definition of technological intelligence

It is the process that focuses precisely on science and technology and its impact on the research and development activities of the enterprise;

Technological intelligence, as defined by both (Decamps and Nyach) is the evaluation of current and new technology and the anticipation of technological developments in the future (technological intelligence experts deal with basic and applied research, patents, etc., according to the point of view of others;

As identified by the researcher (Hanti _2014), there is sensitive information about the development of external information and technology that can affect the position of the competing enterprise (Judy Muhammad Ramzi, 2020, p. 242).

Know the intelligence of the competitor

Competitor intelligence is defined as accurate, reliable and directly related information with competitors available promptly, as this type of intelligence provides organisations with data and information that enables them to predict what will happen in the competitive environment by analyzing the current performance of competitors and their intrinsic capabilities, knowing their movements in the markets, their strengths and weaknesses, identifying their strategic plans for specific markets, understanding their marketing policies, knowing the market goal of competitors, research and development activities and their market shares (Shihab M. M. Al-Taha, 2021, p. 82).

Market information

Without knowing the needs of the institution's customers and understanding their requests, the institution's work is threatened by competitors. The institution then uses intelligence experts to investigate the news of its customers and customers in the market to develop strategies that protect its

interests, so these resort to following different policies that facilitate their work in this aspect, such as collecting information about customers, then structuring and storing it, then analysing that information and publishing it to the concerned authorities to maintain its currencies and acquire new customers before addressing how to obtain information For Customers (Moussa Siham, 2018, p. 6).

Definition of participation

"Participation is a two-way mutual relationship and a joint effort between the two parties to the administrative process, namely the senior management that supervises the implementation of the planned plans and programs and the workers who carry out the production or service process in an organised and continuous manner";

Second definition: "Participation The legal recognition of the total number of employees in the enterprise as an organised and permanent role in the public policy binding on the conduct of the enterprise or in its normal management in a way that detracts from the powers of absolute capital in the governance and decision-making of the enterprise according to the traditional theory." (Al-Rifai, 2009, p. 14).

Definition of management by participation

Defined by (Blaisr): "It is a philosophy of running institutions aimed at establishing an organisational culture directed towards the democratisation of the institution and the better use of the potential of each worker by promoting them to benefit from their knowledge by encouraging them to participate in making decisions that concern them, and this is done by relying on various types of participation". (Khidr, 2020, p. 22);

Keith and Geri Laing define it as: "that managerial style that is based on the systematic and tangible participation of the organisation's employees in decision-making processes related to the organisation's policies, tasks and problems" (khlfuni, 2021, p. 248);

"It is the creation of a space in the system where all employees, officials, customers and contractors participate and collaborate in the management of organisations and the decision-making and problem-solving process";

"The most common way to solve outstanding problems in organisations is the optimal use of employees' potential in using participatory management, as many reports indicate that the success of most companies is due to their appropriate use of participatory management style in their literature". (Safari, 2016, p. 90).

Procedural definition

Through the previous definitions, management can be defined as participation as follows: It is the management that is based on the involvement of all employees at all administrative levels in the decision-making process and solving outstanding problems with organizations.

Sports organization

A group of individuals united to accomplish a mission, that is, the goal of the institution, and determine the appropriate organizational structure that determines the institution and the function of each individual in it, in addition to the relationship of the individual with other individuals in the group, each country forms sports institutions or federations, in order to support a particular sport, as well as to support sports in general (Abdel Maqsoud & Al-Shafei, 2004, p. 92);

Silverman defines an institution as an organization or organizational formation with specific functions (Rifai, 1999, p. 255);

Khalil Muhammad Hassan Al-Shamma defined it as a collective formation or organization formed through the social interaction of individuals and groups and the subsequent processes, events and functions (Muhammad Hassan Al-Shamaa & Khader Mahmoud, 2014, p. 35).

Procedural definition

It is a group consisting of several natural or legal persons to provide sports services and related services, and that body may not engage in any other activity outside the scope of the sports service.

Previous studies

Studies that dealt with competitive intelligence

Study of Yap and Rashid (2011) Titled "Acquisition and Strategic Use of Competitive Intelligence"

These two researchers studied the possession of competitive intelligence and its strategic uses, as this study aimed to study the current situation with the help of competitive Intelligence in Malaysia and how managers can acquire this type of intelligence from different sources and how it is used, relying on the electronic questionnaire that was sent to 123 companies listed on the Malaysian Stock Exchange. The study found that more than half of the companies surveyed had a formal unit of this intelligence and assigned an average of two to five individuals to engage in competitive intelligence activities. Newspapers, periodicals and the Internet are among the most important sources of competitive intelligence used by managers, and this intelligence is used to make strategic decisions related to customers and competitors. This study recommended the need to pay attention to internal sources of information, as most of these companies neglect it.

Study: Hossein, Farzaneh and Farham (2011), entitled: "Analysis of the Impact of Competitive Intelligence on Innovation in Scientific Research Centers in Isfahan City of Science and Technology"

The study aimed to determine the impact of competitive intelligence on innovation in Isfahan City of Science and Technology. The study used the descriptive approach, and a questionnaire was applied to workers in this city. One of this study's most important results is that using competitive intelligence leads to innovation and contributes to achieving improvement and development.

Study: Fawaz Hamwi, Mohammed Al-Abdullah, (2012) entitled: "Competitive Intelligence of Banking Institutions in the E-Commerce Environment"

In this study, the researchers presented the role of the Internet in generating competitive intelligence through the huge amount of information available on the network, regarding how banks benefit from this process, especially in the era of development and rapid change of technologies used that require competent and discerning individuals in order for the institution to adapt to this development, and maintain its position in the market.

The researchers concluded that obtaining high-quality smart information requires banking institutions to organize their competitive intelligence activity and follow advanced scientific and practical foundations in generating smart information necessary to make sound and meaningful decisions.

Studies on participatory management

A study by Kin Sinny (2001) titled " The relationship between participating in decision making and job satisfaction among secondary school teacher in Korea"Relationship between participation in decision making and job satisfaction among secondary school teachers in Korea"

The study analysed the relationships between participation in decision-making and job satisfaction among secondary school teachers in Korea. The study sample consisted of (701) teachers from secondary schools in Korea who were randomly selected. After collecting the information, the data were processed using linear regression analysis to test hypotheses. The researcher used two tools to measure participation and job satisfaction in his study.

The study found the following results:

- There were statistically significant differences between teacher participation in decision-making and job satisfaction attributable to gender, educational experience, school size and subjects taught by teachers;
- Teachers' perception of job satisfaction has not changed according to demographic variables;
- Actual levels of participation in decision-making positively influenced their perception of job satisfaction;
- Desirable levels of participation in decisions and experience were not related to job satisfaction.

The study by Mohammed Hussein Al-Rifai (2009) is entitled Participatory Management and its Impact on Employees and Management - A Practical Study of a private sector company in telecommunications.

This thesis was submitted as a complement to the requirements for the PhD degree in Human Resource Management at Saint Clemians International University, Britain;

This study aimed to clarify the impact of participation on creating new human relations within the company. The number study population of 800 cases (employee, supervisor, head of department) has been used computer in the registration of cases in order to speed up the process of access to the required forms, and the accuracy of their selection has been collected data and information required to search through a survey includes a set of questions and the study relied on the following tests:

- T-test;
- Anova PANOVA test;
- Kay Square (CHI- Square).

The study reached a set of results, the most important of which were:

- The participation of subordinates in decision-making has an impact on their motivation and enthusiasm;
- There is also a clear impact of participation on employee job satisfaction, sense of achievement and morale;
- The decisions made with the participation of subordinates take longer, but the problem exists at a very small rate. According to the researcher, this problem can be overcome through questionnaires distributed to work teams and can rely on the computer, which speeds up the decision-making process.

The study by Monika Rolkova (2015) entitled"The Features of Participative Management Style".

This study aimed to clarify the features of participatory management and the results of research that focused on the elements of participatory management style. The research sample was a group of subordinates (88540) in network industry companies. In the study, subordinates assessed the level of participation they had in decision-making;

A four-scale Likert cartoon resolution explored this level. The results confirmed that more than half of employees (60.5%) do not have sufficient potential to participate in decision-making even if decisions are closely related to their work;

The results of the study also showed that the empowerment of employees is not at a high level, and although the study assumed that the problem of participation is related to the gender of the manager or employee, as it was assumed that female managers give more room to their subordinates to participate in decision-making, the results of the analysis did not show that;

The study confirmed that the level of participation of subordinates in companies is still low, meaning that their potential is not exploited, in addition to their creative abilities;

The study recommends that companies consider including empowerment technologies in management education programs to develop managers who engage employees in decision-making and use their potential more in the workplace.

Faiza Khalfoni (2021) Participatory Management and the Principle of Job Discipline - A Reading of the Japanese Management Model.

An article from the Journal of Legal and Political Research, Saida University, the study aimed to highlight and clarify the importance and necessity of working with the principle of participatory management to contribute to achieving job discipline;

The subject of management participation as a method to achieve the principle of job discipline has received the attention of many researchers and specialists in the administrative field on the one hand and the attention of managers and officials of institutions on the other hand, as they have recently tended to adopt it in the management process and develop it as much as possible to ensure quality and efficiency at work;

The Japanese administration is considered one of the leading departments that support the principle of participatory management and contribute to encouraging workers to adhere to the implementation of the various rules of the internal organization of institutions, which contributed to improving performance levels in quantity and quality, and contributed to its development and making it a model for successful management at the global level;

Management plays a very important role in achieving job discipline, through which every worker feels that his voice is heard and that he is not just a machine used to achieve certain purposes but rather represents a fundamental pillar that cannot be dispensed with or ignored**.**

Comment on previous studies

We mention the similarities and differences between the current study and previous studies, the most important of which are mentioned through the following points:

Differences between the current study and previous studies:

- The previous study differs from the current one in terms of temporal and spatial frameworks, working conditions and environment;
- The previous study differs from the current study in that the previous study was conducted in economic institutions while the current study was conducted in a sports institution;
- The current study differs from the previous study regarding the number of study samples.

Similarities between the current study and previous studies:

- Use statistical analysis of data;
- Both studies relied on a random sample of the study;
- The hypotheses were tested, and the analysis results were shown based on the statistical analysis program SPSS.

Through all this, the following question can be asked:

Does competitive intelligence contribute to the achievement of management by participating in the institution of the Directorate of Youth and Sports - Tebessa?

Sub-questions:

Aa set of sub-questions have been formulated in order to understand the problem, which are as follows:

- Is there a correlation between competitive intelligence and participatory management at α=0.05 significance level?
- Does competitive intelligence affect participatory management at a significance level α=0.05?
- Does a competitor's intelligence affect participatory management at a significance level of α=0.05?
- Does technological intelligence affect participatory management at a significance level α=0.05?
- Does market intelligence affect participatory management at a significance level α=0.05?

Research hypotheses:

The following hypotheses have been formulated so that the research problem can be further understood:

General hypothesis:

Competitive intelligence contributes to the achievement of management through participation in the Foundation of the Directorate of Youth and Sports – Tebessa.

Partial hypotheses:

- There is a statistically significant correlation between competitive intelligence and participatory management at a significance level α = 0.05;
- There is a statistically significant effect of competitive intelligence on participatory management at a significance level of α = 0.05;
- There is a statistically significant effect of competitor intelligence on participatory management at a significance level α = 0.05;
- There is a statistically significant effect of technological intelligence on participatory management at a significance level α = 0.05;
- Market information has a statistically significant effect on participatory management at the significance level of α = 0.05.

Research objectives

The objectives of the study are to:

It knows the relationship between competitive intelligence and participatory management at the significance level α = 0.05 and the impact of the competitive intelligence dimensions represented in competitor intelligence, technological intelligence and market information on participatory management at the significance level α = 0.05.

The importance of the study

The importance of competitive intelligence lies in the fact that the more information and knowledge obtained by the organisation about competitors, the greater the organisation's ability to develop and implement an effective strategy.

The main weaknesses of competitors may represent an external opportunity, and the main strengths of competitors may represent major threats and determine the nature of the relationship between competitive intelligence and participatory management, in theory, to facilitate its practical testing in the institution under study and reach a perception to activate the relationship between the dimensions of competitive intelligence and management. Participation in the Directorate of Youth and Sports Foundation - Tebessa The importance of this study lies in the fact that it deals with a new topic of great importance, as there is a scarcity of studies on the subject of competitive intelligence and participatory management together, especially since it is considered one of the contemporary administrative concepts that still need to study its various aspects.

Research methodology and field procedures

The exploratory study

Must penetrate the practical medium to be familiar with all the basic aspects of the study, which is only done through the exploratory study on the study community and the research sample. In the first step, we visited the sports institution under study and conducted a free interview with the institution's frames to obtain some information and data. We distributed a preliminary questionnaire to eight employees to identify the shortcomings and gaps of the questionnaire before distributing the final.

After our contact with the staff and a discussion with them to identify the clarity of the questions in general and their suitability to the subject of the study, the paragraphs of the questionnaire were identified and reformulated accurately and knowledge of the conditions of field achievement, which have a close and direct link to the variables of the study and the place of study, and the research tool to distribute the questionnaire in the institution.

Study methodology

The study methodology shows the method used by the researcher in his study of a particular phenomenon to reach general results. The method used in this study is the descriptive analytical approach, considering that the latter is not limited to collecting information and facts but goes beyond it to find solutions to the problem in question.

Research areas

Time Domain

This research was initiated in January, the questionnaire began to be prepared in February, and the tool was distributed in March. Moreover, we began to analyse and sort the results immediately after, so the work was produced at the beginning of May 2023.

Spatial domain

The Directorate of Youth and Sports of the Wilaya of Tebessa represents the spatial sphere.

Study population and sample selection

The study population is a random sample of employees working in the Directorate of Youth and Sports - Tebessa.

We distributed the questionnaire to a random sample of employees in the Directorate of Youth and Sports - Tebessa, which comprised 46 employees, including supervisors, managers and employees. After collecting the data, we adopted 40 valid for the study and excluded 06 as shown in the table:

Table 1: Number of Questionnaires Adopted in the Study

questionnaire	distributed	excluded	suitable for analysis
the number	46	06	40

Source: Prepared by the researcher based on the questionnaire.

Study tools

In order to collect the necessary data for the study, we relied on the questionnaire in line with the quality of the topic.

Questionnaire

The objectives of the study and the questions it raises require the use of a questionnaire addressed to the workers of the Directorate of Youth and Sports - Tebessa. The parts that make up the design of the questionnaire are as follows:

Part I: General information. The first part of the questionnaire relates to the demographic factors of the sample: gender, educational level, professional experience, nature of activity and social status.

Part II: The second part of the questionnaire concerns a survey on competitive intelligence and management by participating in the institution of the Directorate of Youth and Sports - Tebessa through 32 phrases.

Questionnaire scale

To convert the study answers into quantitative data, the SPSS V26 system was used because it is more expressive and diversified, giving wider scopes.

The validity and stability of the tool

The truthfulness of the tool means the ability of the questionnaire to measure the variables developed to measure it, which was verified by presenting it to several arbitrators from professors. Moreover, in light of the observations, the form was modified.

Stability of the study tool

Cronbach's Alpha test was applied to ensure the stability of the study tool, as represented in the following table:

Table 2: Cronbach's Alpha Test Result

	number of phrases	Stability coefficient	honesty coefficient
The questionnaire as a whole	32	0.895	0.946

Source: Based on SPSS results.

Through the results shown in Table (02), it is clear that the value of α for the questionnaire amounted to 0.895, i.e., approximately 89.5%, which is higher than 60%, and this reflects the stability of the resolution, and the value of the validity coefficient was 0.946, which is a high value and close to 1. Therefore, we have confirmed the validity and stability of the resolution. Therefore, this scale is fixed for the respondents, that is, they understand its items in the same way and as intended by the researcher, and from it, i.e., can be adopted because the percentage of achieving the same results if it is reapplied again is estimated at: 89.5%.

Normal distribution moderation test

The moderation of the distribution was tested, as the studied sample of the population follows the normal distribution, before testing the research model and studying the relationship between its variables to identify the nature of the tests that will be applied in the study. If the samples follow the normal distribution, parametric tests should be used, while if they follow an abnormal distribution, it is necessary to apply non-parametric tests. Therefore, it must be clarified:

Table 3: Shapiro-Wilk Test Results

the hub	The number of paragraphs	Z value	significance level
competitive intelligence	21	0.952	0.086
Participatory management	11	0.950	0.073

Source: Based on SPSS results,

It is clear from the above table that the two axes of the study have a significance level greater than 5%, i.e., the two samples are moderate and follow the normal distribution, and therefore, parametric tests must be used to test hypotheses.

Moral and linear relationship between dependent and independent variable

To ensure the linearity relationship between the independent variable "competitive intelligence" and the dependent variable "participatory management", the simple regression model Linear regression was relied upon, and the following table illustrates this:

Table 4: Test of Significance and Linear Relationship between Dependent and Independent Variable

model	sum of squares	degree of freedom df	middle squares	The calculated F value	Significance level Sig
Regression	.997	1	.997	4.733	.036
The error	8.009	38	.211		
Total	9.006	39			
the variable	B	The standard error	β coefficient	calculated t value	Significance level Sig
Constant	2.233	.631		3.537	.001
competitive intelligence	.367	.169	.333	2.175	.036
Correlation coefficient: 0.333	Determination coefficient: 0.111			Dependent variable: Participatory management	

Source: Based on SPSS results.

It is clear from the above table that the calculated F value is 4.733 with a p-value of 0.036, which is less than the significance level α≤ 0.05. It is clear from the same table that the coefficient of determination is equal to 0.111, which means that 11.1% of the variance in participatory management is due to changes in competitive intelligence, and the rest is due to other factors. The calculated t-value reached 3.537 with a p-value of 0.001, less than the significance level α≤ 0.05, and the value of the coefficient β was 0.333. All this expresses the linearity of the model. It is, therefore, suitable for interpreting the relationship and knowing the degree of correlation between the dependent and independent variables.

Analysis of study results and hypothesis testing

Analysis of study results

First Description of the demographic characteristics of the study sample

Gender:

Table 5: Distribution of Study Sample by Sex

sex	Repetition	The ratio
male	18	45.0
female	22	55.0
the total	40	100

Source: Prepared by the researcher based on the results of the questionnaire.

It is noted from Table (05) that 55% of the studied sample are females and 45% are males.

Lifetime:

Table 6: Distribution of Study Sample Members by Age

the age	Repetition	The ratio
Less than 30 years old	1	2.5
from (30 to 40)	16	40.0
from (40 to 50)	13	32.5
more than 50	10	25.0
the total	40	100

Source: Prepared by the researcher based on the results of the questionnaire.

It is noted from Table (06) that 40% of the studied sample is aged from 30 to 40 years, followed by the age group from 40 to 50 years by 32.5%, then the age groups over 50 years and less than 30 years by 25% and 2.5% respectively.

Study Level:

Table 7: Distribution of Study Sample by Study Level

Educational level	Repetition	The ratio
secondary	7	17.5
Technical	6	15.0
collegiate	19	47.5
Postgraduate studies and above	8	20.0
the total	40	100

Source: Prepared by the researcher based on the results of the questionnaire.

It is noticeable from Table (07) that 47.5% of the studied sample have a university level, followed by a postgraduate level and above with 20%, then a secondary level with 17.5%, a technical level with 15%, and finally a technical level with 4.1%.

Professional Experience:

Table 8: Distribution of Study Sample Members by Professional Experience

Professional expertise	Repetition	The ratio
Less than 5 years	7	17.5
From 5 to 10 years	9	22.5
From 10 to 20 years	16	40.0
the total	40	100

Source: Prepared by the researcher based on the results of the questionnaire.

It is noticeable from Table (08) that 40% of the studied sample have professional experience from 10 to 20 years, followed by the category of 5 to 10 years by 22.5%, then the category over 20 years by 20%, and finally the category of less than five years by 17.5%.

Career Level:

Table 9: Distribution of Study Sample Members by Job Level

Career Level	Repetition	The ratio
employee	25	62.5
supervisor	5	12.5
Head of the Department	8	20.0
Administrator	2	5.0
the total	40	100

Source: Prepared by the researcher based on the results of the questionnaire.

It is noticeable from Table (09) that 62.5% of the studied sample occupy the position of employee, 20% occupy the position of head of department, 12.5% occupy the position of supervisor, and 5% occupy the position of manager.

Statistical methods used for data analysis

The following coefficients were used so that the general indicators of the characteristics of the study population can be obtained,

First, Pearson's simple correlation coefficient measures the degree of correlation and the relationship between the study variables.

$$r= \ ()\frac{1}{n}\sum(\frac{x-\bar{x}}{s_x})\frac{y-\bar{y}}{s_y}$$

n: Number of views;

xi: values of the first variable;

Yi: Section of the second variable;

s_x: Standard deviation of the first variable;

s_y: Standard deviation of the second variable.

Frequencies and percentages:

It was used to describe the characteristics of the study population and to determine the response towards the axes of the study tool and calculated by the following law:

Percentage = (phrase frequency × 100) / Grand Total

Cronbach alpha coefficient:

It was used to determine the coefficient of stability of the study instrument, and the following equation expresses it:

$$a = \frac{n}{n-1}\left(1-\frac{\sum vi}{vt}\right)$$

Where:

A: represents Cronbach's alpha;

N: Represents the number of questions;

Vt: Represents the variance in the sum of the axes of the form;

Vi: Represents the variance of the interlocutor's questions.

Fourth Mean: An indicator of the order of items according to their importance from the point of view of the selected sample members.

Fifth Déviation Standard: to find out the extent to which values are dispersed from their arithmetic mean;

It was calculated to determine the responses of the study subjects towards the axes and questions of the study tool, as the standard deviation is a statistical indicator that measures the extent of dispersion in changes and is expressed in the following relationship:

$$\delta = \frac{\sqrt{\sum(\mathrm{Xi} - \overline{\mathrm{X})2}}}{\mathrm{N}}$$

Sixth Normal distribution test: (1-Sample Kolmogorov-Smirnov);

It is used to determine whether the data type follows the normal distribution because some statistical tests require that the data distribution follow the normal distribution.

Seventh Simple Regression Analysis:

This test is used to determine the effect of the independent variable on the dependent variable. It is related to regression analysis to predict the future (unknown) based on data collected about the past (known). It analyses one of the variables (dependent variable) affected by another factor or more than one independent factor, and simple linear regression analysis has been used to test the role of electronic management in achieving organisational change in the Directorate of Youth and Sports of the wilaya of Tebessa in Algeria.

- **Fisher test (F):** to test the significance of formulated simple linear regression models (total mortality).

- **One Sample t-test: Used to test the study's hypotheses, and a moral level (0.05) has been adopted to accept or reject hypotheses, one of the moral levels agreed upon in the hypothesis test.**

- Multiple Linear Regression Analysis: to test hypotheses and thus ensure the effect of the independent variable on the dependent variable and the study model's validity.

Second, Studying and analysing the answers of the study sample members:

After encoding and unpacking the data using the SPSS V26 program, the values of the arithmetic averages reached by the study will be dealt with as follows: (3.68 ≥, high evaluation level), (from 2.34 to 3.67, medium evaluation level), (2.33≤, low evaluation level), according to the following equation: (upper value - minimum value) ÷ number of levels, i.e.: (5 - 1) ÷3=1.33This value is the length of the category, so it is:

- Low valuation level: 1 + 1.33 = 2.33≤;
- Average rating level: 2.34 + 1.33 = 3.67, i.e., from 2.34 to 3.67;
- High rating level: from 3.68 to 5.

Analysis of data related to the evaluation of the axis of competitive intelligence

Table 10: Evaluation of Respondents' Answers about the Axis of Competitive Intelligence

Phrase		SMA	standard deviation	Rank	evaluation level
1	The organisation relies on analysing the competitive external environment to find out the competitive advantages of competitors.	3.97	0.62	4	elevated
2	The management of the organisation takes care of formulating its strategy aimed at confronting the threats of competitors	3.93	0.572	6	elevated
3	The organisation works to identify the strongest competitors and monitor their movements	3.63	0.667	17	middle
4	Current competition does not pose threats to the company's strategy	3.3	0.823	18	middle
5	Increasing knowledge of competitors by helping to evaluate and test between strategic alternatives	3.9	0.672	7	elevated
6	Information about competitors helps the company to be alert to their threats	4.2	0.791	1	elevated
7	The institution encourages workers to create and innovate. To outperform competitors	4	0.816	2	elevated
Competitor intelligence		3.85	0.528	/	elevated
8	The institution relies on the latest technologies in collecting and storing information	3.75	0.899	11	elevated
9	The Foundation follows all technological developments and innovations in its field of activity	3.7	0.883	16	elevated
10	The company helps obtain information on external technology to identify effective opportunities.	3.98	0.48	3	elevated
11	The institution relies on the Internet to obtain information about competitors.	3.23	1.025	20	middle
12	The company monitors the technologies used by competitors.	3.23	1.097	19	middle
13	The Foundation works to provide facilities to customers to ensure their loyalty	3.18	1.01	21	middle
Technological Intelligence		3.51	0.685	/	middle
14	Market information helps shape the company's overall strategies	3.75	0.543	13	elevated
15	Market information contributes to understanding the movement of work in the market	3.83	0.712	9	elevated
16	Market information is used when developing company services	3.97	0.276	5	elevated
17	Market intelligence improves the quality of company services	3.83	0.446	10	elevated
18	The organisation relies on the policy of the alliance to increase its profits.	3.73	0.452	15	elevated
19	The organisation monitors new industry alliances to develop a strong strategy to counter competitors.	3.75	0.87	12	elevated
20	The organisation relies on integrating with other organisations to reduce costs.	3.73	0.905	14	elevated
21	The Foundation relies on the participation of other institutions to increase its market share	3.85	0.58	8	elevated
Market Intelligence		3.80	0.481	/	elevated
competitive intelligence		3.72	0.436	/	elevated

Source: Based on the results of the questionnaire.

Through Table (10), it is clear that the total arithmetic means of the answers of the members of the study sample in the Directorate of Youth and Sports - Tebessa about the competitor's intelligence dimension was estimated at 3.85 with a standard deviation of 0.528, which indicates a high level of evaluation for this dimension;

The arithmetic averages of the statements of this dimension ranged between 4.20 and 3.30, and statement No. 6 came with the highest arithmetic average, which means that the employees of the Directorate of Youth and Sports – Tebessa agree that they can rely on their supervisors if they encounter difficulties at work;

It is clear from the same table that the total arithmetic mean of the answers of the study sample members in the Directorate of Youth and Sports Tebessa about the dimension of technological intelligence was estimated at 3.51 with a standard deviation of 0.685, which means that the respondents' answers about this dimension came at an average evaluation level;

The arithmetic averages of the statements of this dimension ranged from 3.98 to 3.18, and statement number 10 came with the highest arithmetic average, which means that the employees of the Tebessa Foundation overwhelmingly agree that their colleagues provide them with help and assistance.

It is also clear from the above table that the total arithmetic mean of the responses of the study sample members in the Tebessa institution about the market intelligence dimension was estimated at 3.80 with

a standard deviation of 0.481, and this means that the responses of the respondents came with a high evaluation level for what was stated in the statements of this dimension;

The arithmetic averages of the statements of this dimension ranged between 3.97 and 3.73, and statement No. 16 came with the highest arithmetic average, which means that the employees of the Tebessa institution highly agree that the management demands the rights of workers if those rights are squandered;

The overall arithmetic mean of the responses of the study sample for the axis of competitive intelligence, estimated at 3.72 and with a standard deviation of 0.436, can be said to agree significantly with what was stated in this axis.

Analysis of data related to the evaluation of the participatory management axis

Table 11: Evaluation of Respondents' Answers about the Participatory Management Axis

Phrase	SMA	standard deviation	Rank	evaluation level
22. Participatory decision-making has resulted in the decision not being promptly reached	3.43	0.931	8	middle
23. The feeling of instability in the current job position due to the person's participation in decision-making and taking responsibility.	3.37	0.868	9	middle
24. Some obstacles do not allow the sample to participate in their suggestions and ideas.	3.95	0.783	3	elevated
25. The samples' self-censorship increases when they implement decisions that they have participated in making.	3.98	0.768	2	elevated
26. The relationship between employees and management improves when they share ideas and proposals.	3.53	0.877	7	middle
27. They do not have the desire to express opinion, make decisions and assume responsibilities.	3.53	0.905	6	middle
28. The samples' productivity rises, and their work performance improves when they participate with management in their suggestions and ideas.	4.1	0.496	1	elevated
29. Participation wastes a lot of participants' time in making decisions.	2.98	0.891	11	middle
30. The sample see that the relationship between employees and management is good.	3.68	0.572	5	elevated
31. Some meeting participants do not participate in the meeting effectively and prefer silence.	3.2	1.018	10	middle
32. Some management team members do not possess the intellectual and cognitive qualifications and abilities to influence or participate in decision-making.	3.85	0.921	4	elevated
Participatory management	3.60	0.481	/	middle

Source: Based on the results of the questionnaire.

Through Table (11), it is clear that the total arithmetic average of the answers of the study sample members in the Directorate of Youth and Sports - Tebessa - about participatory management was estimated at 3.60 with a standard deviation of 0.481, and this means the answers of the sample members with an average evaluation level of what was stated in the phrases of this dimension;

The arithmetic averages of the statements of this dimension ranged between 4.10 and 3.20, and the statement No. 28 came with the highest arithmetic average, which means that the employees of the Directorate of Youth and Sports – Tebessa find that the information they obtain helps them to help the institution in competing with other sports institutions.

Hypothesis testing

First: Multicollinearity test Before conducting hypothesis testing, it is necessary to ensure that the data are suitable for regression analysis, and this is done through testing the linear multiplicity between independent sub-variables, where the VIF inflation coefficient must be less than 5, and the permissible variance value is greater than 0.05, and Table (12) shows that:

Table 12: The Result of Linear Multiplicity

independent variables	allowable variance Tolerance	Variation inflation factor (VIF).
Competitor intelligence	.420	2.381
Technological Intelligence	.658	1.519
Market Intelligence	.330	3.030
Dependent variable: Participatory management		

Source: Based on SPSS results**.**

It is clear from Table (12) that the value of the variance inflation coefficient for all independent variables is less than 05, and its value ranges between (1.519-3.030), and the value of the permissible variance was greater than 0.05 and ranged between (0.330-0.658). We conclude that there is no high correlation between the independent variables and that the data are suitable for regression testing.

The first hypothesis states that:

There is a correlation between competitive intelligence and participatory management at the significance level α=0.05.

Pearson's correlation coefficient values will be treated as follows:

weak relationship	$0 \leq r < 0.3$
average relationship	$0.3 \leq r < 0.7$
strong relationship	$0.7 \leq r < 1$

In order to test the validity of the first hypothesis, the Pearson correlation coefficient was calculated between the competitive intelligence variable and the participatory management variable, and Table (13) illustrates this:

Table 13: The Correlation between the Competitive Intelligence and Participatory Management Variables

		Participatory management
competitive intelligence	Pearson correlation coefficient	0.333*
	Significance Level (Sig)	0.036
	N	40

Source: Based on SPSS results**.**

It is clear from the above table that there is a positive and medium correlation with significant significance at α = 0.05 between the competitive intelligence variable and the participatory management variable, which amounted to 0.333 or approximately 33.3%.

Since the significance level was estimated at 0.036 below the significance level α = 0.05, accept the first research hypothesis that there is a correlation between competitive intelligence and participatory management at α = 0.05 significance level.

The second hypothesis states that:

- Competitive intelligence affects participatory management at the significance level of α = 0.05.

Testing the validity of hypothesis 2, a simple linear regression method was used, which is a statistical linear model that estimates the relationship that is associated between one quantitative variable, which is the dependent variable (participatory management) with another quantitative variable, which is the independent variable (competitive intelligence). This model results in a linear statistical equation explaining the relationship between the two variables or estimating the dependent variable's value when knowing the independent variable's value.

Table 14: Showing the Results of the Simple Regression Model

model	sum of squares	DF degree of freedom	mean of squares	The calculated F value	Significance level Sig
Regression	.997	1	.997	4.733	.036
The error	8.009	38	.211		
Total	9.006	39			
the variable	B	The standard error	β coefficient	calculated t value	Significance level Sig
Constant	2.233	.631		3.537	.001
competitive Intelligence	.367	.169	.333	2.175	.036
Correlation coefficient: 0.333	Determination coefficient: 0.111			Dependent variable: Participatory management	

Source: Prepared by the researcher based on the outputs of the SPSS program.

It is clear from the above table that the model's validity to test the hypothesis is fixed based on the calculated F value of 4.733 with a p-value of 0.036, which is less than the significance level α = 0.05. It is clear from the same table that the correlation coefficient between the two variables (competitive Intelligence and participatory management) is 33.3%, which indicates a direct and medium correlation between them, and we also note that the coefficient of determination is equal to 0.111, which means that 11.1% of the variance in the management with participation in the institution of the Directorate of Youth and Sports Tebessa is due to the effect of Competitive Intelligence. The rest is due to other factors; the calculated t-value was 2.175 with a p-value of 0.036, below the significance level α = 0.05, and the value of the coefficient of β was 0.333.

Since the significance level was estimated at 0.036 below the significance level α = 0.05, the second hypothesis that states a statistically significant effect of competitive intelligence on participatory management is accepted at the significance level α = 0.05.

Sub-hypothesis 03states that:

- Competitor intelligence affects participatory management at a significance level α = 0.05.

To test sub-hypothesis 03 a simple linear regression method was used between a partial dimension of the independent variable (Competitor intelligence) and the dependent variable (participatory management).

Table 15: Shows the Results of the Simple Regression Model

model	sum of squares	DF degree of freedom	mean of squares	The calculated F value	Significance level Sig
Regression	2.591	1	2.591	15.350	.000
The error	6.415	38	.169		
Total	9.006	39			
the variable	B	The standard error	β coefficient	calculated t value	Significance level Sig
Constant	1.720	.484		3.556	.001
competitive intelligence	.488	.125	.536	3.918	.000
Correlation coefficient: 0.536	Determination coefficient: 0.288			Dependent variable: Participatory management	

Source: Prepared by the researcher based on the outputs of the SPSS program.

It is clear from the above table that the validity of the model to test the hypothesis based on the calculated F value of 15.350 with a probability value of 0.000, which is less than the significance level α = 0.05, and it is clear from the same table that the correlation coefficient between the two variables (competitor's intelligence and participatory management) is 53.6%, which indicates a direct and medium correlation between them. We also note that the coefficient of determination is equal to 0.288, which means that 28.8% of the variance in the management with participation in the institution of the Directorate of Youth and Sports Tebessa is due to the effect of The Intelligence of the competitor. The rest is due to other factors, as the calculated t-value was 3.918 with a p-value of 0.000, below the significance level α = 0.05, and the value of the coefficient of β was 0.536.

Since the significance level is estimated at 0.000 below the significance level α = 0.05, hypothesis No. 2.1 is accepted, which states a statistically significant effect of the competitor's intelligence on participatory management at the significance level α = 0.05.

The regression equation can be reached as follows:

$$y = 1.720 + 0.488x$$

Sub-hypothesis 04 states that:

- Technological intelligence affects participatory management at a significance level α=0.05.

To test sub-hypothesis 04, a simple linear regression method was used between a partial dimension of the independent variable (Technological Intelligence) and the dependent variable (participatory management).

Table 16: Shows the Results of the Simple Regression Model

model	sum of squares	DF degree of freedom	mean of squares	The calculated F value	Significance level Sig
Regression	.119	1	.119	.507	.481
The error	8.888	38	.234		
Total	9.006	39			
the variable	B	The standard error	β coefficient	calculated t value	Significance level Sig
Constant	3.880	.404		9.600	.000
Technological Intelligence	-.081	.113	-.115	-.712	.481
Correlation coefficient: -0.115	Determination coefficient: 0.013			Dependent variable: Participatory management	

Source: Prepared by the researcher based on the outputs of the SPSS program.

It is clear from the above table that the model's validity to test the hypothesis is stable based on the calculated F value of 0.507 with a p-value of 0.481, which is greater than the significance level α = 0.05. It is clear from the same table that the correlation coefficient between the two variables (technological intelligence and participatory management) is -11.5%, which indicates an inverse and weak correlation between them, and the calculated t-value was -0.712 with a p-value of 0.481, which is greater than the significance level α = 0.05.

Since the significance level is estimated at 0.481, greater than the significance level α = 0.05, we deny the validity of research hypothesis No.04.

Sub-hypothesis 05 states that:

- Market intelligence influences participatory management at a significance level α = 0.05.

To test sub-hypothesis No. 05, a simple linear regression method was used between a partial dimension of the independent variable (market intelligence) and the dependent variable (participatory management).

Table 17: Showing the Results of the Simple Regression Model

model	sum of squares	DF degree of freedom	mean of squares	The calculated F value	Significance level Sig
Regression	2.068	1	2.068	11.325	.002
The error	6.938	38	.183		
Total	9.006	39			
the variable	B	The standard error	β coefficient	calculated t value	Significance level Sig
Constant	1.778	.545		3.261	.002
Market Intelligence	.479	.142	.479	3.365	.002
Correlation coefficient: 0.479	Determination coefficient: 0.230			Dependent variable: Participatory management	

Source: Prepared by the student based on the outcomes of the SPSS program.

It is clear from the above table that the validity of the model to test the hypothesis based on the calculated F value of 11.325 with a p-value of 0.002, which is less than the significance level α = 0.05, and it is clear from the same table that the correlation coefficient between the two variables (market intelligence and participatory management) is 47.9%, which indicates a direct and average correlation between them. We also note that the coefficient of determination is equal to 0.230, and this means that 23% of the variance in the management with participation in the institution of the Directorate of Youth and Sports Tebessa is due to the effect of Market intelligence. The rest is due to other factors; the calculated t-value was 3.365 with a p-value of 0.002, below the significance level α = 0.05, and the value of the coefficient of β was 0.479.

Since the significance level is estimated at 0.002 below the significance level α = 0.05, research hypothesis 05 is accepted, which states that market intelligence has a statistically significant effect on participatory management at the significance level of α = 0.05. The regression equation can be reached as follows:

$$y = 1.778 + 0.479x$$

There are statistically significant differences in the answers of the study sample members on the axes of competitive intelligence and participatory management according to the personal dimensions variable at the significance level 0.05.

This hypothesis is divided into partial hypotheses as follows:

Sub-hypothesis states that:

• There are statistically significant differences in the responses of the study sample on the axes of competitive intelligence and participatory management according to the gender variable at the significance level of 0.05.

To test the validity of the hypothesis, the T-test was used for the differences in the sample answers according to the gender variable, and the following table shows this:

Table 18: Shows the Results of the T-Test

the variable	sex	the number	SMA	t value	Significance level Sig
competitive intelligence	male	18	3.6046	-1.531	0.134
	female	22	3.8131		
Participatory management	male	18	3.5859	-0.140	0.890
	female	22	3.6074		

Source: Based on SPSS results**.**

It is clear from Table (18) that the average answers of male respondents about competitive intelligence amounted to 3.60, which is close to the average of female respondents. The t-test result came with -1.531 and a probability value of 0.134 greater than the significance level α = 0.05, which means that there are no statistically significant differences at the significance level α = 0.05 between the averages of the answers of male and female sample members about competitive intelligence.

It is also clear from the same table data that the average answers of male respondents about participatory management amounted to 3.58, which is close to the average of female respondents, which amounted to 3.60. The result of the t-test was -0.140, and the p-value of 0.890 was greater than the significance level α = 0.05, which means that there are no statistically significant differences at the significance level α = 0.05 between the averages of the answers of male and female sample members about participatory management. Since the probability values in the institution under study are greater than the significance level α = 0.05, the answers of all respondents of different sexes about the axes of competitive intelligence and participatory management are similar. Hence, we deny the validity of the research hypothesis.

Sub-hypothesis states that:

There are statistically significant differences in the responses of the study sample on the axes of competitive intelligence and participatory management according to the age variable at the significance level of 0.05.

To test the validity of the hypothesis, the One-way ANOVA test was used for differences in the sample answers according to the age variable, and the following table shows this:

Table 19: Shows the Results of the One-way ANOVA Test

the variable	the age	SMA	F value	Significance level Sig
competitive intelligence	Less than 30 years old	3.2837	0.419	0.741
	from (30 to 40)	3.6980		
	from (40 to 50)	3.7830		
	more than 50	3.7141		
Participatory management	Less than 30 years old	3.6364	1.664	0.192
	from (30 to 40)	3.4205		
	from (40 to 50)	3.8112		
	more than 50	3.6000		

Source: Based on SPSS results**.**

It is clear from the above table and for the competitive intelligence variable that the value of F was 0.419 and the p-value of 0.741, which is greater than α = 0.05 and therefore not statistically significant, which

means that there are no differences in the responses of the sample members about competitive intelligence for the age variable;

It is also clear from the same table for the participatory management variable that the value of F was 1.664 with a p-value of 0.192, which is greater than α = 0.05 and therefore not statistically significant, which means that there are no differences in the responses of the respondents about participatory management for the age variable;

Since the probability values in the institution under study are greater than the significance level α = 0.05, this means that the answers of all respondents of different ages about the axes of competitive intelligence and participatory management are similar;

Hence, we deny the validity of the research hypothesis.

Sub-hypothesis states that:

• There are statistically significant differences in the answers of the study sample on the axes of competitive intelligence and participatory management according to the academic level variable at the significance level of 0.05.

The validity of the hypothesis was tested using the One-way ANOVA test. The differences in the sample answers according to the academic level variable are shown in the following table:

Table 20: Shows the Results of the One-way ANOVA Test

the variable	academic level	SMA	F value	Significance level Sig
competitive intelligence	secondary	3.7217	0.729	0.541
	Technical	3.9339		
	collegiate	3.7075		
	Postgraduate studies and above	3.5843		
Participatory management	secondary	3.5325	1.240	0.310
	Technical	3.2879		
	collegiate	3.7081		
	Postgraduate studies and above	3.6250		

Source: Based on SPSS results**.**

It is clear from the above table and for the competitive intelligence variable that the value of F was 0.729 and the p-value of 0.541, which is greater than α = 0.05 and therefore not statistically significant, which means that there are no differences in the responses of the respondents about competitive intelligence for the academic level variable;

It is also clear from the same table for the participatory management variable that the value of F was 1.240 with a p-value of 0.310, which is greater than α = 0.05 and, therefore, not statistically significant, which means that there are no differences in the responses of the respondents about participatory management for the academic level variable;

Since the probability values in the institution under study are greater than the significance level α = 0.05, this means that the answers of all respondents are similar at different levels of study about the axes of competitive intelligence and participatory management;

Hence, we deny the validity of the research hypothesis.

Sub-hypothesis states that:

• There are statistically significant differences in the responses of the study sample members on the axes of competitive intelligence and participatory management according to the variable of professional experience at the significance level of 0.05.

To test the validity of the hypothesis, The One-way ANOVA test was used for differences in sample answers according to the professional experience variable, and the following table shows this:

Table 21: Shows the Results of the One-way ANOVA Test

the variable	Professional expertise	SMA	F value	Significance level Sig
competitive intelligence	Less than five years	3.2786	5.912	0.002
	From 5 to 10 years	4.0655		
	From 10 to 20 years	3.7049		
	More than 20 years	3.7443		
Participatory management	Less than five years	3.3247	1.255	0.304
	From 5 to 10 years	3.5960		
	From 10 to 20 years	3.7386		
	More than 20 years	3.5568		

Source: Based on SPSS results.

It is clear from the above table and for the competitive intelligence variable that the value of F reached 5.912 and the p-value of 0.002, which is less than α = 0.05 and, therefore, it is statistically significant, which means that there are differences in the responses of the sample members about competitive intelligence for the professional experience variable.

Table 22: Shows the Results of the Multiple Comparisons Approach

competitive intelligence	Less than five years	From 5 to 10 years	-.78685*	.002
		From 10 to 20 years	-.42623	.112
		More than 20 years	-.46567	.138

Source: Based on SPSS results**.**

This is shown in the table above, where there are differences in the answers of the sample members with professional experience of less than five years and with professional experience from 5 to 10 years, as the difference in the average answer was estimated at -0.786 with a statistical significance of 0.002 less than α = 0.05;

It is also clear from Table (21) for the participatory management variable that the value of F was 1.255 with a p-value of 0.304, which is greater than α = 0.05 and therefore not statistically significant, which means that there are no differences in the responses of the respondents about participatory management for the professional experience variable;

Since the probability values in the institution under study are less than the significance level for the competitive intelligence variable and greater than the significance level α = 0.05 for the participatory management variable, the research hypothesis is accepted, which states that there are statistically significant differences in the answers of the study sample members on the axes of competitive intelligence and participatory management according to the professional experience variable at the significance level of 0.05.

Sub-hypothesis states that:

• There are statistically significant differences in the responses of the study sample members on the axes of competitive intelligence and participatory management according to the functional level variable at the significance level 0.05.

The One-way ANOVA test was used to test the viability of the hypotheses. The differences in the sample answers according to the functional level variable are shown in the following table:

Table 23: Shows the Results of the One-way ANOVA Test

variable	Career Level	SMA	F value	Significance level Sig
competitive intelligence	employee	3.6524	1.454	0.243
	supervisor	4.0365		
	Head of the Department	3.6600		
	Administrator	4.0000		
Participatory management	employee	3.5491	2.421	0.082
	supervisor	4.0000		
	Head of the Department	3.3977		
	Administrator	4.0000		

Source: Based on SPSS results.

It is clear from the above table and for the competitive intelligence variable that the value of F reached 1.454 and a p-value of 0.243, which is greater than α = 0.05 and, therefore, not statistically significant, which means that there are no differences in the responses of the sample members about competitive intelligence for the functional level variable;

It is also clear from the same table for the participatory management variable that the value of F was 2.421 with a p-value of 0.082, which is greater than α = 0.05 and therefore not statistically significant, which means that there are no differences in the responses of the respondents about participatory management for the functional level variable.

Since the probability values in the institution under study are greater than the significance level α = 0.05, all respondents' answers at different job levels are similar about the axes of competitive intelligence and participatory management.

Hence, we deny the research hypothesis.

Conclusion

After this study, it can be considered that the adoption of the sports organisation of the process of competitive intelligence in an environment characterized by intense competition and instability in light of environmental changes and current technological developments is considered the most successful solution to achieve the sports organisation goals and achieve a competitive position because the survival of this sports organisation in a competitive business environment is linked to the extent of its ability and flexibility to adapt and respond to the expected and sudden changes by maximising the benefit Competitive intelligence and staying connected to the variables occurring in the outside world.

Competitive intelligence is a distinctive process of great importance, especially for large competitive sports institutions that want to excel and withstand intense competition. Therefore, sports institutions today have paid great attention to competitive intelligence for their awareness of its effective role in achieving it. The sports institution's rush for the better in the complex and changing business world is considered a solid base in the field of decision-making, identifying competitive needs and prioritising the intelligence requirements of the organisation to lead the course of the competitive intelligence process in terms of collecting, saving, analysing and managing External information that can influence the company's preservation, decisions and operations. The imperative of competitive intelligence is manifested in the areas and dimensions in which it manifests itself and in the goals it seeks to reach.;

The main objective of competitive intelligence is to provide complex, evaluated and analysed information that is part of strategic information management that is associated with and inherent to the strategies of the organisation, and it also aims to keep the organisation informed and have the ability to pre-equip and anticipate challenges so that it can continue to grow and prosper through its ability to predict what will happen in the environment, and then develop an appropriate response, either to obtain an advantage from it or to help shape the environment, and it forms a symbolic relationship with strategic planning so that it and, in the goals, provides key inputs to help guide the strategic planning process of the sports organisation;

Participatory management is also considered one of the most important administrative methods that contribute to achieving effectiveness for the institution, especially if it is by the principles of participation in the decision-making process, as this method allows all employees, regardless of their job level, to express their opinions and concerns, which encourages the exchange of experiences, which in turn leads to achieving positive results that benefit them and the sports organisation as a whole.

Which led us to reach a set of results:

First: The results of the study

Where many results were reached, as follows:

Theoretical results

- Competitive intelligence contributes to providing information and data about the external environment of the organisation and keeping it informed and can keep pace with development, prosperity and growth; this is what supports the study of Hussein, Farzeneh and Farham 2011;
- Competitive intelligence contributes to the process of evaluating competitors and thus reduces competitive surprises within the sports organisation;
- Competitive intelligence helps identify market opportunities and predictability of competitors' market strategy, and the sports organisation avoids threats from potential competitors;
- Helps the sports organisation track competitors' capabilities to understand the methods and strategies it uses to gain and sustain competitive advantage;

- Competitive intelligence within a sports organisation contributes to the participatory management process of sports organisations and their selection of the appropriate strategy for their current situation based on the information it provides about competition and competitors;
- Competitive intelligence within sports organisations seeks to increase productivity, increase technological innovations, increase profitability, increase market share;
- Competitive intelligence provides the sports organisation with the necessary knowledge, information and data to help it choose its long-term strategies;
- Technological intelligence strives to achieve the evaluation of new technology and anticipate the coming technological changes and focuses on research and development processes in sports organisations and the latest inventions;
- Customer intelligence contributes to knowing information about the customer environment, including current and potential customers, and providing new services focused on their celebrated needs and requirements to gain their satisfaction, and this is considered within the planned goals;
- Competitor intelligence provides accurate information about competitors and the market and identifies areas of strength, weakness, opportunities and threats;
- The competitive intelligence system helps strategic management in business organisations in the process of participatory management and strategic decision-making, and this is what supports the study of Yap and Rashid.2011;
- The study of both market opportunities and competitor threats contributes to the organisation's readiness to choose the appropriate strategy for it to adapt to external variables;
- Sports organisations use competitive intelligence to compare themselves with other organisations and to facilitate the process of strategic selection in proportion to their competitive position and keep pace with shifting external changes;
- Participatory management contributes to allowing employees to develop their skills and talents by allowing them to face the problems and issues facing management;
- The participation of employees in decision-making leads to an increase in efficiency of their return and pursuit of those goals and decisions; this is what supports the study of Muhammad Hussein Al-Rifai (2009);
- Providing a minimum level of confidence that gives employees a sense of comfort and ability to work supports the study of Faiza Khalafouni (2021).

Field applied results

After studying the role of competitive intelligence in achieving management with participation in the institution of the Directorate of Youth and Sports in Tebessa, the following was reached:

- The results of the analysis of the questionnaire items showed that there is a significant impact of the dimensions of competitive intelligence (competitor intelligence, technological intelligence, market intelligence, strategic alliance.) on the level of organisational commitment of employees in the sports organisation according to the answers of employees;
- Competitive intelligence helps to raise the quality of decisions made to address problems and situations at the level of the organisation or the level of its sectors and management in various technical, administrative and financial fields;
- Competitive intelligence helps create a climate conducive to the emergence and sharing of new ideas, knowledge and skills;
- Competitive intelligence seeks to make employees within a sports organisation put the general interest of the team and the organisation first;
- Competitive intelligence empowers employees by delegating authority, developing their skills and enhancing their self-confidence in order to create efficient new leaders and multiple teams that are self-reliant;
- Competitive intelligence helps build a clear vision for the sports organisation, encourages working individuals to implement it and work to modify or change existing systems;

- The sports institution relies on future studies in anticipation of the crises expected to occur in the future, and this is evidence of the sports institution's adoption of the principle of competitor intelligence;
- The results obtained in the field study showed a significant average positive correlation at α=0.05;
- Through the statistical analysis process, it became clear that there is a significant effect of the competitor's intelligence and market intelligence dimensions at the level of significance α = 0.05;
- In carrying out its tasks, the sports organisation relies on the provision of competitive intelligence for accurate and reliable information and in making important decisions within the sports body;
- The organisation under study relies on some principles of competitive intelligence and applies some types of it;
- Competitive intelligence allows the sports organisation to predict changes in business relations and adapt to variables in the external environment of organisations;
- The absence of research and development as a tool for competitive intelligence weakens the sports organisation to achieve its core objectives;
- The information obtained by the organisation from competitive intelligence contributes to improving the strategic selection process within the sports organisation, and this is what supports the study of Fawaz Hamwi, Mohammed Al-Abdullah, (2012);
- There was no statistically significant difference (differences) in the sample answers about the two study variables according to (gender, age, educational level, and career level) at the level of significance α = 0.05.

Second recommendations

Through our field study, we decided to propose the following recommendations:

- Encourage the practice of competitive intelligence within sports organisations through the improvement of technological methods in work techniques, research, and technological development to take note of the information necessary to contribute to the achievement of the objectives of the organisation sports;
- Trying to crystallise and understand the managers of sports organisations and employees' awareness of the importance of competitive intelligence and what contributes to it in achieving the interests of strategic management in the sports organisation;
- Enhancing competitive intelligence processes by providing training courses and directing employee behaviour to achieve their integration with the new reality to support their private and public goals;
- Employing information and communication technology to coordinate with some other sports organisations (strategic alliance intelligence) to benefit from their expertise to carry out the process of change in all fields;
- Increase interest in HR practices and development, study the market and learn more about market needs and customers;
- Spreading the culture of competitive intelligence, holding seminars and courses on its importance and how to raise its level, encouraging workers to improve continuously, and directing their interests towards creativity and innovation;
- Trying to allocate a section in the organisational structure of sports organisations called the Competitive Intelligence Department concerned with knowledge, information, data and everything related to the market, competitors, current and potential customers, and how to organise, store, transfer, and apply knowledge;
- Introducing all types of competitive intelligence to improve the performance of participatory management and achieve the strategic selection process in line with external environmental variables;
- Participation improves the relationship between superiors and subordinates, thereby reducing conflicts between management and its employees;
- Participation increases the degree of self-control of employees, and when any individual participates in a secure decision, there will be a high-quality implementation of this work;
- The participation of subordinates in decision-making has an impact on motivation and enthusiasm;

- The organisation should support management with participation because this involves a lot of information transfer between different levels of function.

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