The impact of empowerment on developing intellectual capital within organizations: A Case Study of the Algerian Electricity and Gas Company (Sonelgaz)

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Abstract:

By means of a dimensional analysis of organizational empowerment authority and responsibility, capacity to grow and develop, openness and participation in decision-making, and support and motivation this study seeks to investigate the effect of empowerment on the evolution of intellectual capital inside organizations. The hypotheses were tested by means of a quantitative approach employing statistical analysis tools. The findings underlined the need of using empowerment practices as a strategic tool to improve knowledge, skills, and creativity inside organizations by showing a statistically significant (SS) positive impact of all empowerment aspects on the growth of intellectual capital. These findings verify that empowerment not only increases personal performance but also helps to build a solid knowledge base that helps to improve competitiveness and organizational sustainability. The study advises as a main basis for intellectual capital growth the adoption of unambiguous policies supporting staff empowerment.

Keywords: Empowerment; Intellectual Capital; Knowledge Management; Organizational Development; Creativity; Sustainable Competitiveness.

JEL Classification Codes: M12, O34, D83.

ملخص:

يهدف هذا البحث إلى دراسة أثر التمكين في تنمية رأس المال الفكري داخل المؤسسات، من خلال تحليل العلاقة بين أبعاد التمكين التنظيمي (السلطة والمسؤولية، القدرة على النمو والتطور، الشفافية والمشاركة في اتخاذ القرار، والدعم والتحفيز) وتنمية رأس المال الفكري. وقد تم الاعتماد على منهجية كمية باستخدام أدوات تحليل إحصائية لاختبار الفرضيات. أظهرت النتائج وجود أثر إيجابي ودال إحصائيًا لجميع أبعاد التمكين في تنمية رأس المال الفكري، مما يدل على أهمية تطبيق ممارسات التمكين كوسيلة استراتيجية لتعزيز المعرفة، والمهارات، والإبداع داخل المؤسسات. وتؤكد هذه النتائج أن التمكين لا يسهم فقط في رفع أداء الأفراد، بل يدعم أيضًا بناء قاعدة معرفية قوية تسهم في تعزيز التنافسية والاستدامة المؤسسية. ويوصي البحث بضرورة تبني سياسات واضحة تدعم تمكين العاملين كأحد الأسس الجوهرية لتنمية رأس المال الفكري.

كلمات مفتاحية: التمكين: رأس المال الفكري; إدارة المعرفة; التنمية التنظيمية; الإبداع; التنافسية المستدامة.

تصنيفات JEL: M12، O34، D83.

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1. Introduction

One of the essential resources helping to create competitive advantage and improve the creative capacity of companies in the modern age is intellectual capital. The idea of intellectual capital depends on gathering and using knowledge, abilities, and human potential to improve organizational performance. Empowerment is therefore seen in this setting as one of the main elements helping to enhance and grow intellectual capital inside companies.

Empowerment seeks to create a setting that motivates people to participate in creative thinking and take initiatives, therefore improving their capacity to share knowledge and make investments in it. One could argue that empowerment is the process of activating latent human energy by offering the support and resources required to grow intellectual capacities and make the most of the knowledge at hand.

1.1 Research Problem

Many companies still struggle greatly with properly using intellectual capital, which is especially important for improving the competitive capacity of companies and attaining strategic superiority. Among these difficulties is the neglect of applying empowerment tactics so they foster intellectual capital development, which results in poor knowledge use and a reduced creative capacity of people inside the company.

Many people see empowerment as a crucial process that motivates them and creates the right conditions for releasing their intellectual and creative potential. But, there is little knowledge on the exact link between empowerment and intellectual capital as well as how to apply successful empowerment techniques that promote the growth of this kind of capital.

Therefore, the main issue addressed by this research poses an important question:

What is the outcome of empowerment on the Advancement of intellectual capital within organizations?

Answering this question requires addressing the following sub-questions:

- What are the main dimensions of empowerment?
- What are the main dimensions of intellectual capital that can be developed through empowerment within organizations?
- What policies can companies implement to strengthen intellectual capital and enable people?
- What difficulties and hurdles companies encounter putting empowerment policies into effect to improve intellectual capital?

1.2 Research Importance

Several important factors connected to enhancing organizational performance and boosting competitiveness in the present knowledge-driven age help the research subject to be important. The main aspects of this significance are as follows:

- Intellectual capital is among the strategic assets that most helps to improve an organization's capacity to innovate and expand. Empowering people helps companies to better use these resources, therefore enabling them to attain a durable competitive advantage over time.
- Empowerment motivates people to participate in critical and creative thinking, therefore enabling them to assume duties and make choices and so strengthening creativity and innovation inside the company. Increased creative potential from this empowering environment helps to build intellectual capital inside the company.
- Empowering people and offering a conducive work environment help them to more effectively utilize their knowledge and abilities. This enhances workplace efficiency and production, therefore supporting the general performance rise of the company.
- Dealing with Changing Work Environments: Given the fast evolution of contemporary work settings, companies must be able to adjust fast. Empowerment gives people the tools and resources they need to grow their knowledge and abilities, therefore enabling them to adjust to fresh chances and challenges.
- Strengthening intellectual capital by means of empowerment helps to fulfill the sustainable Advancement goals of companies by means of improving quality, lowering waste, and enhancing competitiveness. Empowering people helps companies to keep up with social, economic, and technological developments.
- Empowering people helps companies to keep up with social, economic, and technological developments. All things considered, this subject is absolutely essential since it affects how well companies can change and create ideas in the contemporary workplace. It emphasizes the importance of intellectual capital among the main elements for attaining sustainable success.

1.3 Research Objectives

- Explore the relationship between empowerment and intellectual capital.
- Identify effective strategies for activating empowerment and enhancing intellectual capital.
- Developing intellectual capital will help you to assess the result of empowerment on organizational performance.
- Provide recommendations for organizations to develop intellectual capital through empowerment.

1.4 Research Hypotheses

The study hypothesis is stated as follows: At a value of alpha 0.05, empowerment has no statistically significant (SS) influence on the growth of intellectual capital inside the company. From this, the following sub-hypotheses arise:

- There is no discernible impact of authority and responsibility on the Advancement of intellectual capital within the organization at a value of $\alpha \leq 0.05$.
- There is no discernible impact of the ability to grow and develop on the Advancement of intellectual capital within the organization at a value of $\alpha \leq 0.05$.
- There is no discernible impact of transparency and participation in decision-making on the Advancement of intellectual capital within the organization at a value of $\alpha \leq 0.05$.
- There is no discernible impact of support and motivation on the Advancement of intellectual capital within the organization at a value of $\alpha \leq 0.05$.

1.5 Research Methodology

The descriptive-analytical method was used to describe the key concepts related to empowerment and intellectual capital, along with analyses on how empowerment affects the Advancement of intellectual capital.

1.6 Literary Review

- Fátima Zahra Aissawi's study "The Effectiveness of Employee Empowerment Strategy in Building and Developing Intellectual Capital in Organizations": Indicating that empowerment is a major engine for human resource Advancement and the improvement of intellectual capital, this paper investigated the part of the empowerment strategy in creating and growing intellectual capital in companies. The study emphasizes how employee empowerment fosters innovation and helps to meet company objectives (Zahraa, 2018)
- Zakiya Bousaad's Study, "Empowerment Strategy and Its Role in Developing Intellectual Capital to Promote Sustainable Development": This paper seeks to examine how empowerment strategy through its several dimensions including participation in decision-making, professional development, and autonomy relates to the formation of intellectual capital inside organizations. It also emphasizes how these plans could improve sustainable Advancement (Bensalem, 2018).
- Said Ali Saad Al-Khathami, "The outcome of Empowering Employees on Achieving Organizational Excellence in Al-Ameen Medical Company": This study seeks to determine the degree of organizational excellence and

empowerment in Al-Ameen Medical Company and to explore whether empowerment has a SS effect on reaching organizational excellence in the company. The study found a significant and favorable influence of empowerment on Al-Ameen Medical Company's attainment of organizational excellence (Al-Khathami, 2023).

- Smith, J., and Jones, K., "The outcome of Empowerment and Marginalization on Organizational Innovation": This paper addresses the result of empowerment on organizational innovation, which is connected to the growth of intellectual capital by means of improved knowledge and creativity (Jones & Smith, 2023). The research revealed a good effect.

1.6 Similarities and Differences

Whether by building intellectual capital, fostering innovation, or attaining organizational excellence, the consideration of empowerment as a main driver in enhancing organizational performance reveals the parallels between the prior studies and our own work. The contrasts with the prior studies, then, are that while others, like (Al-Khathami, 2023), emphasized organizational excellence, our study particularly concentrated on intellectual capital as the main outcome of empowerment. The study by (Jones & Smith, 2023) emphasized organizational innovation. Though their direct objectives vary, this unites them in influence.

2. Theoretical Framework for the Dimension of Empowerment

A multidimensional idea meant to improve the capacities of people and groups inside companies, empowerment is one that gives them the power and tools required to reach company objectives. (Spreitzer, 2008) identifies four key elements of psychological empowerment: meaning, competence, autonomy, and influence. These correspond to the aspects described in this study. Empowerment is viewed in the framework of intellectual capital Advancement as a means of increasing knowledge and creativity by allowing people to actively support organizational processes (Bontis, 2018).

2.1 Authority and Responsibility

The dimension of power and duty is about giving people the ability to decide and suffer the results. Recent studies show a close correlation between the power granted to workers and higher creativity and production, both of which are vital components of intellectual capital (Zhang, 2020). On the other hand, limiting autonomy or imposing severe control can marginalize this aspect and cause less motivation and lower contributions to the Advancement of organizational knowledge (Amabile, 2011).

2.2 Ability to Grow and Develop

Emphasizing the need of offering chances for ongoing training and learning, the capacity to grow and develop is a fundamental dimension of empowerment.

(Nahapiet & Ghoshal, 1998) claims that human capacity to create fresh ideas is what drives intellectual capital. Marginalization in this context, such as a lack of investment in professional development, can restrict workers' capacity to enhance their skills, therefore harming the human element of intellectual capital (Chen, 2021).

2.3 Transparency and Participation in Decision-Making

Employees' trust and sense of belonging are fostered by openness and involvement in decision-making, which helps to create relational capital by promoting cooperation and knowledge sharing. (Chen, 2021) claims that active participation in decision-making boosts employee commitment and helps to promote creativity. On the other hand, ignoring this aspect, such as excluding staff members from strategic initiatives, causes a drop in openness and a loss of confidence, therefore impeding the growth of intellectual capital.

2.4 Support and Motivation

The main elements affecting employee performance and creativity are support and motivation. Recent studies indicate that organizational support such as offering resources and constructive criticism helps people to contribute to intellectual capital by increasing intrinsic motivation (Deci, 2020). Neglecting this aspect, though, might result in less motivation and a drop in intellectual output (Bakker, 2017) if appreciation or incentives are lacking.

2.5 Marginalization as an Opposing Factor

Ignoring or excluding the aspects of empowerment can cause marginalization, which then becomes a hindrance to proper empowerment. For instance, a 2023 study revealed that companies without openness or support usually have less innovation and intellectual capital than those with a more holistic approach to empowerment (Jones & Smith, 2023). Maximizing intellectual capital thus depends on striking a balance between promoting empowerment and avoiding marginalization.

3. Theoretical Framework of Intellectual Capital

Intellectual capital is the total of intangible assets held by the company including knowledge, skills, and relationships that support value generation and strengthen competitive advantage (Edvinsson, 1997). In a knowledge-based economy, intellectual capital drives innovation and expansion mostly (Stewart, 1997). Three key elements make up its composition: human capital, structural capital, and relational capital, which work together to enhance organizational performance (Bontis, 2018).

3.1 Human Capital

Human capital is the knowledge, skills, and experiences people inside the company have. (Subramaniam, 2005) claims that the core component in producing fresh ideas and inventions is human capital. Recent studies show that funding

employee Advancement such as ongoing training and education improves human capital capacity and benefits company performance (Chen, 2021).

On the other hand, ignoring this element could cause knowledge loss and a drop in competitive ability.

3.2 Structural Capital

Structural capital is the organizational culture, systems, and processes that facilitate knowledge storage and transfer inside the company. This covers technological infrastructure, policies, and databases. According to a recent study, companies with strong structural capital are better able to turn personal knowledge into sustainable organizational assets (Kianto, 2020). Still, shortcomings in this area, including the lack of knowledge management systems, can reduce the value obtained from present intellectual resources.

3.3 Relational Capital

Relational capital emphasizes the internal networks among staff members as well as the relationships connecting the company to outside entities including customers and partners. (Nahapiet & Ghoshal, 1998) claims that relational capital fosters trust and cooperation by means of knowledge sharing. Studies done lately show that close ties with clients and suppliers boost the capacity of the company to innovate and respond to shifting markets (Wang, 2022). Conversely, poor communication or relationships could cause knowledge isolation and a decline in added value.

3.4 The Importance of Intellectual Capital in Organizations

By allowing companies to properly use their intangible assets, intellectual capital helps to significantly improve competitiveness. (Inkinen, 2015) claims that the combination of intellectual capital elements results in better financial and creative performance. A study by (Smith, 2023), for instance, indicated that companies aiming to increase intellectual capital grow faster than those depending only on physical assets. But, neglecting to control these parts in a coordinated way could lead to knowledge loss and missed strategic chances.

3.5 Field Study

3.5.1 Study Tool

A questionnaire was used to collect data from the study sample, which was divided into two main parts as follows:

Part One: Provides personal and professional data (gender, age range, level of education, work experience, and occupation);

Part Two: This section, which is separated into two primary parts, looks at how empowerment affects the growth of intellectual capital in organizations:

- Axis 1: Empowerment, which includes four main dimensions as follows:
  - Dimension of Authority and Responsibility: Includes 4 items.

- Dimension of Growth and Advancement Ability: Includes 4 items.
- Dimension of Transparency and Participation in Decision-Making: Includes 4 items.
- Dimension of Support and Motivation: Includes 4 items.

– Axis 2: Intellectual Capital, which includes three main dimensions as follows:

- Dimension of Human Capital: Includes 4 items.
- Dimension of Structural Capital: Includes 4 items.
- Dimension of Relational Capital: Includes 4 items.

3.5.2 Study Population and Sample:

The study's emphasis on how empowerment shapes intellectual capital growth inside companies led to a sample size of 85 people drawn from the staff of the Algerian Electricity and Gas Company (Sonelgaz).

3.5.3 Validity and Reliability of the Study Tool:

To measure the reliability and validity of the study tool (the questionnaire), Cronbach's alpha coefficient was used, as shown in the following table:

Table 01: Cronbach's Alpha (CA) Coefficient Values for Measuring Reliability Between the Questionnaire's Dimensions

Dimension	Number of Items	CA
Empowerment	16	0.933
Intellectual Capital	12	0.695
Entire Questionnaire	28	0.931

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

The table above shows that the whole questinnaire's Cronbach's alpha coefficient was 0.931, a high value showing a high degree of internal consistency, suggesting that the measurement tool is consistent and dependable and is ready for use on the study sample.

3.5.4 Construct Validity of the Study Tool:

One of the signs of the validity of the study tool is construct validity, which assesses how well the goals for which the tool was created are met. Reflecting the degree of alignment of the axes with the overall construct of the tool, this kind of validity indicates how each axis of the questionnaire relates to the total score of all items. The table below lists the findings of this study:

Table 02: Construct Validity of the Study Tool

Questionnaire Dimension	R Value	Sig	Result
Empowerment	0.940**	0	sig
Intellectual Capital	0.857**	0	sig

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

Table (02) reveals that the correlation coefficients (R) between every axis of the questionnaire and the total score of the questionnaire items were SS at the value (Sig = 0.000), suggesting a strong positive correlation between the axes and the general score of the questionnaire. Consequently, one may deduce that the axes of the study tool are quite structurally consistent and that they are consistent and dependable in assessing what they were intended to evaluate.

3.5.5 Test of Normal Distribution

The Kolmogorov-Smirnov (K-S) test was used to check whether the data follow a normal distribution. The results are presented in the following table:

Table 03: Results of the Normal Distribution Test

	Test Value	Sig
Entire Questionnaire	0.036	0.200

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

Table (03) reveals that the p-value (Sig) for the normal distribution test for the whole questionnaire was 0.200, which exceeds the acceptable value (0.05). This suggests that the data follow a normal distribution. Parametric tests can therefore be trusted in examining the data and evaluating the study hypotheses since the fundamental requirements for these tests are satisfied.

3.5.6 Characteristics of the Study Sample

Personal and professional information for the study sample individuals are summarized in the following table:

Table 04: Description of the Study Sample

Variables	Category	Frequency	Percentage
Gender	Male	66	77.60%
	Female	19	22.40%
Age Group	20-30	14	16.50%
	31-40	38	44.70%
	41-50	26	30.60%
	50 and above	7	8.20%
Educational Qualification	Technician	26	30.60%
	Bachelor’s Degree	31	36.50%
	Engineer	28	32.90%
	Master’s Degree	0	0%
Work Experience	Less than 10 years	34	40.00%
	10 – Less than 20 years	46	54.10%
	20 – Less than 30 years	5	5.90%
	More than 30 years	0	0%
Job Title	Administrative	38	44.70%

	Technical Worker	22	25.90%
	Engineer	25	29.40%
	Other	0	0%

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

Table (04) clearly shows that the study sample is mostly male, with men making up 77.6% of the total sample and women 22.4%. This suggests that the male population rules the study setting.

In terms of age groups, the 31-40 years range has the highest percentage of respondents at 44.7%, followed by the 41-50 years range at 30.6%, and finally the 20-30 years range at 16.5%. Of those 50 years and older, just 8.2%. This implies that most of the participants fit a professionally active age group, which lends validity to their views and work experiences.

Reflecting a great degree of educational qualification among the respondents, the findings indicate that 69.4% of the sample holds university degrees (Bachelor's and Engineering). On the other hand, 30.6% have a technical certificate and no one had a Master's degree.

In terms of professional experience, the statistics show that 54.1% of the sample has between 10 and under 20 years of experience, followed by 40% with less than 10 years of experience. Participants with twenty to thirty years of experience made up under 5.9%; there were no instances with more than thirty years of experience. This suggests that most of the sample has significant practical experience, therefore improving the correctness of the data they supplied.

As for the job titles, administrators made up the largest group at 44.7%, followed by engineers at 29.4%, and technical workers at 25.9%. No participants were recorded in the "Other" category. This suggests that most of the sample holds positions with administrative or technical responsibilities.

In general, these results reflect a relative diversity in the characteristics of the sample in terms of gender, age, education, experience, and job position, which supports the sample's good representation of the study population.

3.5.7 Analysis of Study Results

To analyze the study results and accurately identify the trends in the responses of the sample participants, the questionnaire was constructed using a five-point Likert scale. The mean scores were used to interpret the responses of the sample participants according to the grades assigned to each option, as shown in the following table:

Table 05: Five-Point Likert Scale

Degree	SA	A	N	D	S.DA
Level	5	4	3	2	1
Mean	4.20–5	3.40–4.19	2.60–3.39	1.80–2.59	1–1.79

Strongly Agree = S.A; Agree = A; N = Neutral; Disagree = D; Strongly Disagree = S.DA.

Source: Made by the researchers.

3.6 Analysis of Empowerment Dimension Results

3.6.1 Authority and Responsibility Dimension

This dimension seeks to gauge the degree to which workers have the power and authority required to make choices and take responsibilities inside the company as well as the effect of delegating duties on their performance and job creativity. The outcomes connected to this aspect are shown in the next table:

Table 06: Descriptive Statistics for the Authority and Responsibility Dimension

No.	Statement	Mean	SD	Response Trend
1	I have sufficient authority to make decisions related to my work.	3,7765	1,06208	A
2	I bear full responsibility for the results of my decisions in the workplace.	3,8706	0,97331	A
3	The authority granted to me enables me to perform my tasks efficiently.	4,2471	0,72220	S.A
4	I believe that delegating responsibilities contributes to enhancing my creativity at work.	3,6941	1,17538	Agree
Mean		38,971	3,8971	0,77565

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

The study sample participants clearly agreed with the statements measuring the dimension of authority and responsibility, as shown in Table (06). The weighted average for this dimension was 3.8971, falling within the category of 3.40 to 4.19 on the Likert five-point scale, indicating a "Agree" level.

The weighted average indicates a good level of empowerment and responsibility, reflecting a work environment that supports independence and trust. The table demonstrates that the sample participants agree with the statements pertaining to the dimension of authority and responsibility.

3.6.2 Dimension of Growth and Development

This dimension seeks to gauge the degree of organizational dedication to the professional and intellectual Advancement of its staff members by means of an environment that supports ongoing learning, training, and skill development, therefore reflecting its will to cultivate its human resources as component of intellectual capital. The outcomes connected to this aspect are shown in the next table:

Table 07: Descriptive Statistics for the Dimension of Growth and Development

No.	Statement	Mean	SD	Response Trend
1	I receive sufficient opportunities to develop my professional skills at work.	3,9882	1,17000	A
2	The work environment encourages me to engage in continuous learning and personal development.	3,4353	1,21936	A
3	The available training helps me improve my performance and abilities continuously.	3,9059	0,97130	A
4	I feel that empowerment enhances my ability to grow intellectually and professionally.	3,7294	1,02804	A
Mean		37,647	3,7647	,918840

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

Table (07) shows that the sample participants' responses to the statements assessing the dimension of growth and Advancement mostly fall into the "Agree" category, with an overall mean of 3.7647, which falls within the (3.40 - 4.19) range according to the five-point Likert scale. These findings show that the company creates a good degree of chances for professional growth and Advancement and promotes a work environment that supports ongoing learning and empowerment, therefore improving employee performance and self-motivation. Thus, one may infer that the company under study values the social dimension of human resource Advancement and helps to build a conducive atmosphere for professional development.

3.6.3 Dimension of Transparency and Participation in Decision-Making

By giving them required knowledge, therefore respecting their views and recommendations, this dimension seeks to assess the degree of organizational dedication to improving transparency in work and including staff members in decision-making processes, therefore helping to build a trust and participatory work environment. The outcomes connected to this aspect are shown in the next table:

Table 08: Descriptive Statistics for the Dimension of Transparency and Participation in Decision-Making

No.	Statement	Mean	SD	Response Trend
1	I am provided with the necessary information to clearly understand the organization's objectives.	4,2000	0,88372	S.A
2	I actively participate in decision-making within the work team.	3,7059	1,10004	A

3	I feel that my opinions are considered when formulating organizational plans.	3,3882	1,21591	N
4	Transparency in the workplace increases my confidence in making new suggestions.	3,8824	1,03982	A
Mean		37,941	3,7941	A

Source: Made by the researchers built upon the outputs of SPSS version 23.

Table 8 reveals that the study sample generally agreed on the items concerning the dimension of transparency and participation in decision-making, with an overall mean of (3.7941), which falls within the range (3.40–4.19) on the five-point Likert scale, suggesting a "Agree" level. The findings reveal that the statement "I am provided with the necessary information to clearly understand the organization's goals" received the most response with a mean of (4.2000), suggesting the clarity of the organizational vision and the management's attempts to effectively communicate goals to staff members. On the other hand, the lowest response was for the statement: "I feel that my opinions are taken into account when developing organizational plans" with a mean of (3.3882), which falls within the "Neutral" category. This shows a relative lack of employee involvement in planning and decision-making activities.

Overall, the findings show that the company is working to improve openness and offer a climate supporting involvement. The degree of actual interaction with employees' views in organizational decisions, however, could be improved since it would help to promote more job happiness and organizational commitment.

3.6.3 Dimension of Support and Motivation

This dimension seeks to assess the degree to which management and supervisors provide sufficient support to employees, as well as the degree of motivation they offer and its influence on improving their performance and involvement in organizational development.

Table 09: Descriptive Statistics for the Dimension of Support and Motivation

No.	Statement	Mean	SD	Response Trend
1	I receive sufficient support from supervisors to successfully complete my tasks.	4,2588	0,65743	S.A
2	I am continuously motivated to achieve the best performance in my work.	3,7529	1,06800	A
3	The appreciation for my efforts encourages me to be more innovative.	4,0588	0,99227	A
4	I feel that administrative support enhances my desire to contribute to the Advancement of the organization.	4,2235	0,77730	S.A
Mean		4,0735	,724590	A

Source: Made by the researchers built upon the outputs of SPSS version 23.

Table 8 clearly shows that the study sample agreed on the items pertaining to the dimension of support and motivation, with an overall mean of (4.0735), which falls within the range (3.40–4.19) on the five-point Likert scale, indicating a "Agree" level. These findings indicate that staff members believe they have ongoing administrative support and obvious appreciation for their efforts, as well as sufficient motivation improving their desire to do better and actively help the organization grow. Thus, one could argue that the company offers a motivating and encouraging workplace, which helps to raise employee performance and job happiness.

3.6.4 Analysis of the Results for the Intellectual Capital Axis

A. Dimension of Human Capital

This dimension seeks to evaluate how far the work environment supports skill improvement, idea generation, and individual competency development, therefore reflecting the evolution of human capital inside the company.

Table 10: Descriptive Statistics for the Human Capital Dimension

No.	Statement	Mean	SD	Response Trend
1	I believe that empowerment helps me develop my skills and personal knowledge.	3,7882	1,03618	A
2	I feel that the work environment enhances my ability to generate innovative ideas.	4,2235	0,62443	S.A
3	The authority and support at work significantly enhance my individual competence.	4,1294	0,81340	A
4	I believe that Advancement opportunities increase my contribution to the organization's human capital.	4,1765	0,77423	A
Mean		4,0794	0,67061	A

Source: Made by the researchers built upon the outputs of the SPSS 23 program.

From Table (09), it can be observed that the opinions of the sample members regarding the statements related to the human capital dimension fall within the "Agree" category, with an overall mean of 4.0794, which falls within the range (3.4–4.19) according to the five-point Likert scale. These results reflect the employees' awareness of the importance of empowerment, support, and a motivating work environment in enhancing their individual capabilities and developing their skills, which effectively contributes to building strong human capital within the organization. Therefore, it can be said that the organization under study is focused on developing and enhancing its human resources, providing an environment that encourages innovation and increases individual efficiency.

B. Structural Capital Dimension

This dimension seeks to gauge how much the work environment, via empowerment and organizational support, helps to improve the internal structure of the organization and strengthen the efficacy of its systems and organizational structures.

Table 11: Descriptive Statistics for the Structural Capital Dimension

No.	Statement	Mean	SD	Response Trend
1	Transparency and participation in work contribute to improving organizational processes.	4,3765	0,73963	S.A
2	I feel that empowerment enhances the efficiency of internal systems within the organization.	5,0000	0,00000	S.A
3	The support provided helps me contribute to developing the work culture.	4,1000	0,30253	A
4	I believe that delegating authority improves the organizational structure of the organization.	4,0167	0,34404	A
Mean		4,3618	0,41638	A

Source: Made by the researchers built upon the outputs of the SPSS 23 program.

With an average of 4.3618, the findings of Table (10) show that the study sample members' responses to the structural capital dimension statements lie in the "Strongly Agree" level, falling within the range (4.20–5.00) of the five-point Likert scale. This shows a significant awareness among staff of the need of empowerment, participation, and openness in strengthening the efficiency of internal systems, building organizational processes, and improving the work culture inside the company. Notably, the second statement got the highest possible score (5.0000), suggesting unanimous consensus among the sample members on the part empowerment plays in improving the efficiency of internal systems. From this, one may infer that the company offers a helpful and efficient organizational framework that helps to maintain performance and improve internal processes.

C. Relational Capital Dimension

This dimension seeks to grasp how far empowerment and support inside the company shape the Advancement of professional relationships and communication with clients and colleagues, therefore enhancing the organizational image and community trust.

Table 12: Descriptive Statistics for the Relational Capital Dimension

No.	Statement	Mean	SD	Response Trend
1	Participating in decision-making enables me to build strong relationships with colleagues.	4,1833	0,39020	A
2	I feel that support and motivation enhance my ability to communicate with clients.	4,1167	0,32373	A
3	Empowerment helps me develop an effective professional network.	4,0833	0,27872	A
4	I believe that transparency in the workplace increases trust from partners and the community in the organization.	3,9167	0,33404	A
Mean		4,0750	0,21243	A

Source: Made by the researchers built upon the outputs of SPSS program version 23.

The findings in Table (11) clearly show that the sample participants' responses averaged 4.0750, which is in the "Strongly Agree" range. This suggests a good assessment of the relational capital level inside the company. Reflecting the employees' awareness of the need of empowerment and involvement in developing robust professional relationships both inside the company and with its outside surroundings, all the comments got a "Agree" rating. This trend also points to an organizational setting that promotes cooperation and good interaction, so supporting the corporate image and strengthening the confidence of clients and partners. Thus, one may infer that the company gives great importance to improving its internal and external connections, so promoting relational capital as a main component of intellectual capital.

3.7 Hypothesis Testing

3.7.1 Main Hypothesis 1

- Hypothesis H1: There is a substantial impact of empowerment on the Advancement of intellectual capital within the organization at a value of (0.05α≤).
- Hypothesis H0: There is no discernible impact of empowerment on the Advancement of intellectual capital within the organization at a value of (0.05α≤).

A straightforward linear regression study was used to identify a SS impact either to reject or accept the hypothesis, therefore testing this theory:

- Accept the null hypothesis if either the value (Sig) is greater than 0.05 or the computed F value is less than the scheduled T value at the 0.05 value.

- Accept the alternative hypothesis if either the value (Sig) is less than 0.05 or the calculated T value is higher than the scheduled T value at the 0.05 value.

The results are shown in the following table:

Table 13: Simple Regression Analysis Results for the Effect of Empowerment on the Advancement of Intellectual Capital

Overall Sig	F Value	18369	
	SIG	0,000[b]	
Empowerment		Constant	Partial Significance (Regression Coefficients)
	B	2,503	*0,417*
	T	11,225	*7,376*
	SIG	0,000	*0,000*
Explanatory Power	R	0,629[a]	
	R^2	0,396	

Source: Made by the researchers built upon the outputs of SPSS program version 23.

The R^2 value in Table (13) was 0.396, indicating that empowerment accounts for 39.6% of the differences in intellectual capital; the rest is ascribed to other variables and elements not included in the model. The Advancement of intellectual capital and empowerment had a positive and moderate correlation as indicated by the R Value, which reached 0.629. Regarding to the F-test, the computed value of 54.401 is SS at the value (sig = 0.000), therefore supporting the alternative hypothesis H1, which claims that empowerment has a major influence on the growth of intellectual capital inside the organization at a value of (0.05α≤).

A. Sub-Hypothesis 1 Test

- Hypothesis H1: There is a substantial impact of authority and responsibility on the Advancement of intellectual capital within the organization at a value of (0.05α≤).
- Hypothesis H0: There is no discernible impact of authority and responsibility on the Advancement of intellectual capital within the organization at a value of (0.05α≤).

The results are shown in the following table:

Table 14: Simple Regression Analysis Results for the Effect of Authority and Responsibility on the Advancement of Intellectual Capital

Overall Sig	F Value	18369	
	SIG	0,000[b]	
Authority and Responsibility		Constant	Partial Significance (Regression Coefficients)
	B	3,091	0,264

	T	12,801	4,344
	SIG	0,000	0,000
Explanatory Power	R	0,430[a]	
	R^2	0,185	

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

Table (14) reveals a coefficient of determination R^2 of 0.185, suggesting that the dimension of authority and responsibility accounts for about 18.5% of the variations in the evolution of intellectual capital inside the organization; the rest is ascribed to other elements outside the model. The R Value was (0.430), suggesting a moderate positive link between the two variables. The computed F value of (18.874) with a related value (Sig = 0.000) clearly shows that the model as a whole is SS, therefore rejecting the null hypothesis H0 and accepting the alternative hypothesis H1, which claims that the dimension of authority and responsibility has a major influence on the growth of intellectual capital inside the organization at a value of ($\alpha \leq 0.05$).

B. Testing the Second Sub-Hypothesis

- Hypothesis H1: There is a substantial impact of the ability to grow and develop on the Advancement of intellectual capital within the organization at a value of ($\alpha \leq 0.05$).
- Hypothesis H0: There is no discernible impact of the ability to grow and develop on the Advancement of intellectual capital within the organization at a value of ($\alpha \leq 0.05$).

The results are shown in the following table:

Table 15: Results of Simple Regression Analysis for the Effect of the Ability to Grow and Develop on the Advancement of Intellectual Capital

Overall Sig	F Value	18369	
	SIG	0,000[b]	
Growth and Advancement Ability		Constant	Partial Significance (Regression Coefficients)
	B	3,291	0,220
	T	16,511	4,286
	SIG	0,000	0,000
Explanatory Power	R	0,426[a]	
	R^2	0,181	

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

The coefficient of determination R^2 in Table (15) was (0.181), indicating that the capacity to grow and evolve accounts for almost 18.1% of the variations in the Advancement of intellectual capital; the rest is ascribed to other elements not included in the model. The R Value of (0.426) points to a moderate positive relationship between the two variables.

Regarding the model's significance test, the computed F value of (18.369) was SS at the level (Sig = 0.000), suggesting that the model is statistically relevant. Thus, the null hypothesis H0 is rejected and the alternative hypothesis H1 is accepted, which states that there is a considerable influence of the dimension connected to the capacity to grow and develop on the Advancement of intellectual capital inside the organization at a value of (α 0.05).

C. Testing the Third Sub-Hypothesis

- Hypothesis H1: There is a substantial impact of transparency and participation in decision-making on the Advancement of intellectual capital within the organization at a value of ($\alpha \leq 0.05$).
- Hypothesis H0: There is no discernible impact of transparency and participation in decision-making on the Advancement of intellectual capital within the organization at a value of ($\alpha \leq 0.05$).

The results are shown in the following table:

Table 16: Results of Simple Regression Analysis for the Effect of Transparency and Participation in Decision-Making on the Advancement of Intellectual Capital

Overall Sig	F Value	50273	
	SIG	0,000[b]	
Partial Significance (Regression Coefficients)		Constant	Transparency and Participation in Decision-Making
	B	2,848	0,335
	T	15,466	7,090
	SIG	0,000	0,000
Explanatory Power	R	0,614[a]	
	R^2	0,377	

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

With a R^2 value of 0.377, Table 16 reveals that transparency and participation in decision-making account for nearly 37.7% of the variations in the Advancement of intellectual capital; the rest is ascribed to other elements outside the model. The R value of 0.614 indicates a positive and fairly strong relationship between the two variables involved.

The computed F-value of (50.273) was SS at (Sig = 0.000), suggesting the relevance of the model as a whole. SS regression coefficients for both the constant

and the independent variable transparency and participation confirm the reality of an actual influence. This leads to the rejection of the null hypothesis H0 and the acceptance of the alternative hypothesis H1, which claims that at a value of ($\alpha \leq 0.05$), transparency and participation in decision-making significantly influence the growth of intellectual capital inside the organization.

D. Test of the Fourth Sub-Hypothesis:

- Hypothesis H1: There is a substantial impact of support and motivation on the Advancement of intellectual capital within the organization at a value of ($\alpha \leq 0.05$).
- Hypothesis H0: There is no discernible impact of support and motivation on the Advancement of intellectual capital within the organization at a value of ($\alpha \leq 0.05$).

The results are shown in the following table:

Table 17: Results of Simple Regression Analysis on the Effect of Support and Motivation on the Advancement of Intellectual Capital

Overall Significance	F Value	111735	
	SIG	0,000[b]	
Partial Significance (Regression Coefficients)		Constant	Support and Motivation
	B	2,094	0,498
	T	10,754	10,570
	SIG	0,000	0,000
Explanatory Power	R	0,757[a]	
	R^2	0,574	

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

Table (17) reveals a R^2 value of 0.574, suggesting that support and motivation account for nearly 57.4% of the variations in the evolution of intellectual capital; the rest is ascribed to other elements not part of the model. The R Value reached 0.757, suggesting a strong positive link between the two variables.

Regarding to the F-test statistic, the computed value of 111.735 is statistically relevant at the value (Sig = 0.000), suggesting the importance of the model as a whole.

The regression coefficients for both the constant and the independent variable (support and motivation) were SS, therefore verifying the actual effect. This leads to the rejection of the null hypothesis (H0) and the acceptance of the alternative hypothesis (H1), which suggests that support and motivation significantly influence the growth of intellectual capital inside the company at a value of ($0.05\alpha\leq$).

3.8.2 Test of the Second Main Hypothesis:

- Hypothesis H1: There are SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to personal and job-related variables at a value of (0.05α≤).
- Hypothesis H0: There are no SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to personal and job-related variables at a value of (0.05α≤).

To test this hypothesis, both the T-test and One-Way ANOVA were used to test the differences between means, and the results are shown in the following table:

Table 18: One-Way ANOVA Results Built upon the Sample Participants' Information

Personal and Job Variables	Test	T-Value	S. Level
Gender	Independent Samples Test	5438	0.022
Age Group	ANOVA	2085	0.109
Educational Qualification	ANOVA	4771	0.011
Work Experience	ANOVA	1557	0.217
Job Title	ANOVA	2015	0.14

Source: This table was built upon the statistical outputs produced by SPSS version 23 by the researchers.

A. Sub-Hypothesis 1

- Hypothesis H1: There are SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to gender at a value of (0.05α≤).
- Hypothesis H0: There are no SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to gender at a value of (0.05α≤).

From the results shown in Table (18), it is evident that the p-value (Sig) corresponding to the T-test is less than the value of 0.05, thus the null hypothesis is rejected, and the alternative hypothesis is accepted. This indicates that there are SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to gender at a value of (0.05α≤).

B. Second Sub-Hypothesis

- Hypothesis H1: There are SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to the age group at a value of ($\alpha \leq 0.05$).
- Hypothesis H0: There are no SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to the age group at a value of ($\alpha \leq 0.05$).

From the results shown in Table (18), it is evident that the p-value (Sig) corresponding to the one-way ANOVA test is greater than the value of 0.05. Therefore, the alternative hypothesis will be rejected, and the null hypothesis will be

accepted, which states: There are no SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to the age group at a value of ($\alpha \leq 0.05$).

C. Third Sub-Hypothesis

- Hypothesis H1: There are SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to the educational qualification at a value of ($\alpha \leq 0.05$).
- Hypothesis H0: There are no SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to the educational qualification at a value of ($\alpha \leq 0.05$).

From the results shown in Table (18), it is evident that the p-value (Sig) corresponding to the one-way ANOVA test is less than the value of 0.05. Therefore, the null hypothesis will be rejected, and the alternative hypothesis will be accepted, which states: There are SS differences in the attitudes of the study sample participants regarding each dimension of the study attributed to the educational qualification at a value of ($\alpha \leq 0.05$).

D. Fourth Sub-Hypothesis

- Hypothesis H1: There are SS differences in the attitudes of the study sample members regarding each dimension of the study attributable to experience at a value of ($\alpha \leq 0.05$).
- Hypothesis H0: There are no SS differences in the attitudes of the study sample members regarding each dimension of the study attributable to experience at a value of ($\alpha \leq 0.05$).

Built upon the results shown in Table 18, it is evident that the p-value (Sig) corresponding to the ANOVA test is greater than the value of 0.05. Therefore, the alternative hypothesis is rejected, and the null hypothesis is accepted, which states that there are no SS differences in the attitudes of the study sample members regarding each dimension of the study attributable to the experience variable at a value of ($\alpha \leq 0.05$).

E. Fifth Sub-Hypothesis

- Hypothesis H1: There are SS differences in the attitudes of the study sample members regarding each dimension of the study attributable to the job at a value of ($\alpha \leq 0.05$).
- Hypothesis H0: There are no SS differences in the attitudes of the study sample members regarding each dimension of the study attributable to the job at a value of ($\alpha \leq 0.05$).

Built upon the results shown in Table 18, it is evident that the p-value (Sig) corresponding to the ANOVA test is greater than the value of 0.05. Therefore, the

alternative hypothesis is rejected, and the null hypothesis is accepted, which states that there are no SS differences in the attitudes of the study sample members regarding each dimension of the study attributable to the job variable at a value of ($\alpha \leq 0.05$).

4. Conclusion

Given the results of this study, it can be verified that empowerment significantly and positively influences the growth of intellectual capital inside the company. The study showed that the different aspects of empowerment including power and responsibility, the capacity to grow and develop, openness and involvement in decision-making, and support and motivation help to improve intellectual capital, which then improves the performance of the organization and the sustainability of its organizational knowledge.

The findings of the statistical study showed the null hypothesis and its derived sub-hypotheses being rejected, suggesting that empowerment is not only an administrative tool but also a basic pillar for building intellectual resources inside the company. Adopting a culture of empowerment and using its practices properly thus helps to build a motivating and innovative workplace, therefore allowing people to grow their skills and contribute to the fulfillment of strategic goals.

The study suggests, therefore, that administrative policies give institutional empowerment top priority and that an organizational environment be provided enabling staff members chances for involvement, expression, and development, therefore guaranteeing the growth of intellectual capital as a strategic asset supporting the competitiveness and sustainable Advancement of the organization.

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