

The impact of visual Management on the Strategic Acceleration; embedding knowledge as a Moderating Variable

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Abstract

The research stems from its goal of identifying the impact of visual management on the strategic acceleration of business organizations and the state of this effect through the knowledge embedding in the Iraqi oil companies. The oil sector was tested, represented by (3) oil companies, and a sample of (151) individuals who participated in activating the visual management, distributed in higher management levels. The research relied on the descriptive-analytical approach and the questionnaire was a main tool for collecting data and information. The results showed that visual management positively affects strategic acceleration. Moreover, This effect is amplified by the mediating role played by Embedding Knowledge.

Keywords: Visual Management, Strategic Acceleration, Embedding Knowledge.

1. Introduction

The global economy witnessed transformations and changes in the last century, including globalization, privatization, and rapid developments in information technology, especially the shift towards a knowledge economy, which reflected in competition and the need for speed to the completion of work. Embodiment in operations, rules and routine procedures to become axioms of knowledge work. On the other hand, workers simply practice what adds value to the organization. In order to facilitate and accelerate operations, we assume that visual management are one of the modern administrative methods in which attention is given to means and objectives in a holistic manner. The vision of the organization is transmitted to workers at different levels of management by means of basic principles, strategies, functions and visual tools. The urgent need for this administrative style has increased, especially in developing countries, because it is not just a crisis management, but also a continuous practical application to manage daily events in the place and time of their occurrence.

As a result of the above global economy transformations, obtaining valuable results faster is critical to achieving success and continuity in this complex environment. Strategic acceleration is not just about creating great strategies, it is about knowing how to accelerate strategy implementation by embracing the right ideas and taking the right actions. It is the place where persistence meets implementation, as most organizations, in times of crisis, follow the wait-and-watch scenario as their strategy. However, only a few of them follow up on investment operations in new projects, taking accelerated strategic steps to seize opportunities created by crises that can only be seen by those who possess clarity and focus. in reading environmental data.

The research was interested in determining the effect of visual management on strategic acceleration, based on including embedding knowledge as a mediate variable that would increase this effect in a group of productive oil companies. The research came to meet the oil sector's need for such studies in application of modern administrative methods that accelerate the improvement of its performance, the results of which might greatly reflected on the national economy.

2. Literature Reviews

2.1. Visual Management

Drawings, shapes and symbols have been used since cavemen relied on drawings to express perceptions that facilitate communication between people, so humans have since used visual signs to communicate and share information (Lindlöf, 2014, pp. 6-7). Thus, visual management (VM) has a rich historical background of

achievements in various activities, for example construction activities in ancient Egypt, army activities in China, ethical behavior assessment activities, visual control of production and many others (Dotlić & Erceg, p. 2).

From a literature review point of view, we can put the concept of visual management within three perspectives; the first is a strategic perspective, which emphasizes that visual management is not a tool or technology, but rather an administrative strategy to include visual information in operations. (Imai, 2012b, p. 103) referred to the mechanism that works about the visual management strategy, showing its practice, starting from the presentation of the rejected product - the actual product, up to the plans, lists and performance records. as management and employees are constantly reminded of all the elements that make quality, cost and delivery (QCD) within the required level, based on the presentation of the comprehensive strategy and numbers production and a list of the most recent suggestions of employees. In this regard, between (Slimani, Douli, & Mir, 2017, p. 39), VM is the managerial strategy for integrating visual tools in workplaces with the aim of increasing transparency in organizational processes. The second is the perspective of the Lean Production System, which is based on Japanese experiences that emphasize production free of damage and waste. (Protzman, Whiton, & Protzman, 2019, pp. 258-259) emphasized that the VM is a system in which devices are installed to detect defects or injuries to prevent their occurrence, as it does not allow problems to pass unaddressed, and in order for this system to be successful, organizations must by integrating lean production tools (eg Kanban, Endon) within it. In order for the lean production process to be more effective, (King, 2019, pp. 147, 159) states that it must be managed in work sites that are a source of value-added production, in order to achieve rapid response and reduce the severity of problems by reducing the feedback loop using visual indicators. Thus, it facilitates effective and purposeful communication between managers and workers and leads to true visual management.

The third perspective focused on visual management as a way of presenting information and visualizing problems. (Dotlić & Erceg, 2017, p. 2) explained that visual management is the process of displaying important information of the system so that anyone who comes to the workplace even those who are not familiar with the details of the process can quickly understand what is under control and what is not. Visual management is an approach that uses information to explain itself by using visual devices to communicate effectively with others. (Eaidgah et al., 2016, pp. 3-4) and (Abdelkhalek et al., 2019, p. 1069) emphasized that visual management is a tool for presenting information. Through a set of graphic and image tools to make the process more transparent to visualize and visualize problems so that they can be solved. In doing so, the VM transfers business requirements to visual incentives to communicate, clarify and integrate vision, mission, goals, values, and culture into the business (ŠRAMKOVÁ & RIDZIKOVÁ, 2020, p. 58).

Based on the above intellectual premises, and despite the different perspectives that put forward the concept of visual management, they agreed in essence, sometimes implicitly and explicitly at other times, that visual management, whether it is an approach, a strategy, a tool, a technique, or a means, is intended to reveal the progress of operations and business on the ground. And the accompanying organizational problems and challenges, as it emphasizes that management does not lie behind offices and records, but rather management starts from the work site. Which in turn indicates that the visual management is responsible for understanding the business, diagnosing performance in a realistic way, removing the distances between the administrative levels, and clarifying the information with a high degree of transparency, since the organization with all its parties are united on the same goal. Thus, it creates a work environment that speaks for itself, as any individual entering the work environment for the first time can know the progress of operations and evaluate the work at a quick glance.

2.1.1. The value derived from visual management

Visual management is generally used in the operations of any organization, and through it it is possible to manage the workplace and maintain the current conditions and mechanism determined by the senior management team based on its application in two main areas: the first is to control and control the operating area and the work environment, and the second is to report facts and figures about the work area Through a communications panel (Rich et al., 2006, p. 81). It may come to mind that this management is frequently used in production processes, but (Knop, 2020, p. 265) stressed that its importance is not limited to the production process, but also to logistical operations, maintenance and work safety. Several studies confirm that the importance of using visual management is increasing wherever there is a need for communication and interaction between the human element and the process. In this regard, he discussed (Lindlöf, 2014, pp. 69-70) the importance of visual management according to two directions: The first shows that visual management supports the ability to process organizational information, and this trend confirms that the communication that is operated and supported by visual management methods provides the organization with the ability to process information, this ability is key in addressing the following: 1)

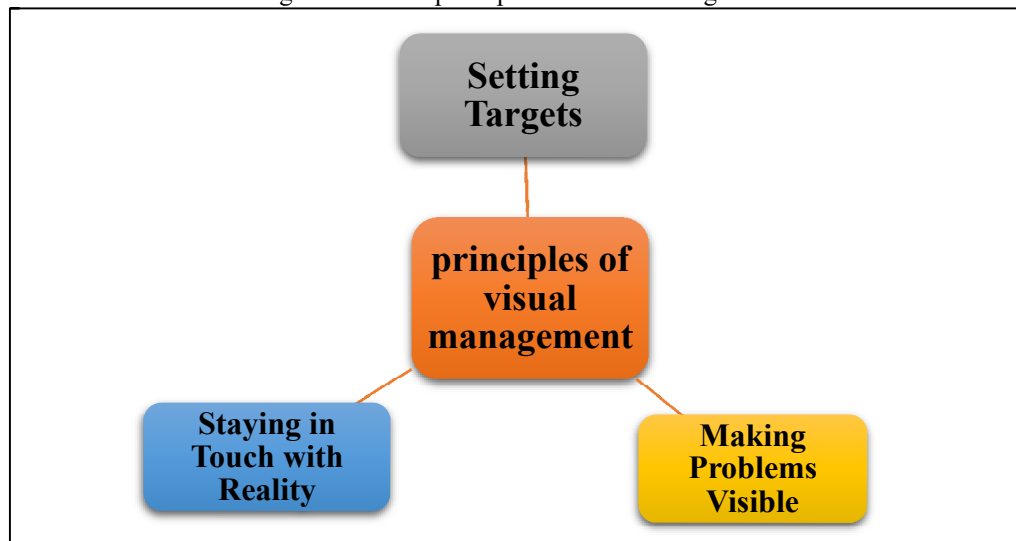
Uncertainty, as obtaining information Its use is one of the key strategies for reducing uncertainty, 2) ambiguity, as it increases awareness of ambiguities in R&D teams, and provides a means for teams to communicate and create strategies to reduce ambiguity. The second emphasizes the possibility of visual management to play an important role in supporting communication between individuals.

2.1.2. Visual management models

The Japanese management consultant and business theorist (Masaaki Imai) put forward a model of visual management explaining its three main principles. The idea of the model was based on the fact that (gemba gemba) is subject to deviations every day.) or they are out of control (that is, there are deviations), both cases are clarified by the visual management through the basic principles that show what is rejected and what is required, as well as clarifying the charts and lists of performance as they continue to remind management and workers from the presentation of the strategy to the suggestions of workers .The model, as in Figure (1), included three basic principles as clarified by (Imai, 2012a, p. 103), which are as follows:

1. **Making Problems Visible:** starting from the first principle of the (VM), the manager can see the problems at a quick glance the moment he enters the gemba site, and here the visual management works to show the distortions to all employees - managers, supervisors and workers - as it can at the same time take Corrective actions are needed, and if management cannot highlight the problem in real time, no one will be able to solve it properly and time and resources are wasted (Singh & Singh, 2015, p. 90).
2. **Staying in Touch with Reality:** The second principle of the VM helps both workers and supervisors to remain in direct contact with the reality of gemba, when the performance of the process is characterized by transparency which is usually done through documented performance (i.e. clear presentation of lists and performance records, sales volume, production numbers recurring problems, customer complaints, etc.) Workers and managers remain in direct contact with developments in the workplace which ensures they remain in touch with reality, which in turn keeps operations under control and sends early warning signals as soon as any malfunctions arise (Al Smadi, 2009, p. 207).
3. **Setting Targets:** One of the most powerful visual effects of management is through its principle of setting goals. Numbers alone are not enough to motivate individuals. Without goals, numbers are useless. Based on this principle (Singh & Singh, 2015, p. 90), members of the organization become aware of management's expectations regarding improvements. He (Imai, 2012a, p. 112) explained that defining the goal of improvements is one of the roles and policies of senior management, as long and medium-term policies are developed as well as annual policies and clearly presented to employees, and these policies expressing goals are divided according to administrative levels until they reach the level Operational so that everyone understands the need to adhere to improvement activities and is inculcated in the minds of employees when they realize that their activities are linked to the strategies of the organization.

Figure 1 - Basic principles of visual management



Source:Prepared by researchers based on: Imai, M. (2012a). *Gemba Kaizen : A commonsense approach to a continuous improvement strategy* (Second Edition ed.): McGraw-Hill.

2.2. Strategic Acceleration

With the turmoil always looming on the horizon, organizations today struggle to remain highly focused, innovative and entrepreneurial by doing businesses that inherently possess these attributes (Shankar & Shepherd, 2018, p. 18). Often, organizations fail not because they do something wrong or weak, but because they keep doing the right thing for too long, and their business model stagnates and is unable to cope with turmoil and intense global competition. They need to accelerate the development of business models, which are structures of knowledge that show how to set limits The company and how to create value and organize its internal structure and management (Doz & Kosonen, 2010, pp. 370-371). In addition, the organization needs to accelerate to reach organizational excellence, which in turn adopts the development of strategic plans aimed at achieving long-term prosperity in line with the organization and its environment, as well as implementing those plans to ensure the growth and strengthening of the organization in various fields (Al Somaidee & AL-Zubaidi , 2021, p. 3708).

The process of accelerating organizations to make them smarter and faster in dealing with strategic challenges is no easy feat. Once the basic principles of acceleration are established and adhered to by motivating workers to participate in challenges or seize opportunities, it will make them stronger, more satisfied and flexible in accepting change, which enhances agility and speed to deal with a fast-moving and more volatile world. In this direction, he put forward (Kotter, 2014, pp. 79-81) the basic principles of strategic acceleration, which are as follows:

- 1- Increasing the number of individuals involved in establishing or implementing strategic initiatives.
- 2- Change agents: the availability of active volunteers to bring about effective change.
- 3- Passion: the desire of individuals as agents to change and work overtime voluntarily if they feel that the task is rational, as a result of their real passion for work. So the results will be better than expected and at no extra cost.
- 4- Leadership: Strategic acceleration operations need leadership behaviors to manage them, as they start work without waiting for senior officials to give orders, envision what can be done instead of just discovering what needs to be done within normal limits, working without boredom or frustration until opportunities are taken advantage of.
- 5- Flexibility in completing tasks: To ensure effective strategy acceleration, it must work flexibly within the management-driven hierarchy so that tasks are completed efficiently and reliably as well as constantly and gradually improve themselves to deal with rapidly growing strategic challenges and agility.

In this regard, and from a literature review, two trends can be clarified, explaining the acceleration within a number of concepts: The first trend is business acceleration or companies that focus on accelerating start-up companies and call it business accelerators. As (Shankar & Shepherd, 2018, p. 4) defined it as a group program for a limited period that includes entrepreneurs who own emerging projects and includes supporting instructions and methods for learning and presenting integrated content about an emerging project on a specific day called the presentation day, in which projects are presented to investors potential to adopt, finance and accelerate its launch and implementation.

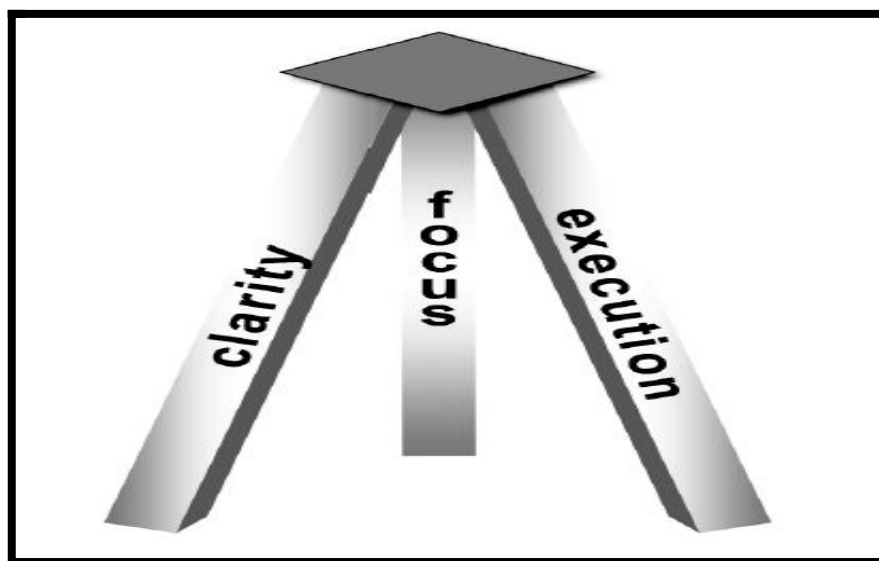
The second trend is the acceleration of activities and operations. This trend of acceleration depends on experience by compressing the time required to implement activities (Hassard, 2002, p. 885). Which is meant to carry out organizational activities and processes faster than usual (Swink, 2003, p. 323). The dependence of activities on time has led to an increasing interest in accelerating organizational life (Reinecke & Ansari, 2017, p. 407), as (Skade, Stanske, Wenzel, & Koch, 2020, p. 106) refers to acceleration is the performance of activities during shorter periods of time. It is an ever-present necessity in modern organizations and societies as it represents a driving force for actors to achieve their goals and desires more quickly in response to intense competition. Within the same orientation falls the strategic acceleration, which he described (Jary, 2009, pp. 1.4) as a passport to the highest levels of success, by understanding how to focus on high-value activities that increase the speed of results that organizations seek in preparation for the implementation and achievement of goals . In the same direction, (Hall, 2020, p. 2), strategic acceleration was interpreted as accelerating the organization's ability to implement its strategy through the use of the latest business simulation techniques with personal management workshops, and thus creating a smarter and more competitive organization in its markets. In this regard, he summarized (Cohen, 2013, pp. 20-26) four ways to accelerate organizational activities, which are as follows: Organizational speed: It means organizing business at regular intervals. Organizations that speed up their activities in a regular manner achieve better performance. Planning through compressing the planning steps to speed up and coordinate activities, especially in turbulent environments, as short-term plans with a focus on flexibility in their implementation increased the chances of planning success and pressure. His steps in turbulent environments, previous experiences of teams, companies,

especially emerging ones that have a senior management team with industry experience, deliver products to market faster with low probability of failure as a result of their retention of business processes and previously developed communication patterns, and thus their ability to accelerate activities. Team formation and characteristics As multifunctional management teams speed up business processes, responding more quickly to competitors' moves. On the other hand, strong leaders speed up the launch of products in the market and facilitate quick decision-making. In this way, strategic acceleration can be defined as the organization's ability to adopt the acceleration feature of the modern era, starting from its future vision and strategic plan to support focusing on value-added activities, leading to effective implementation and achieving goals as quickly as possible, achieving the highest levels of success.

2.2.1. A model of strategic acceleration

The need for speed at all organizational levels is one of the biggest changes that have occurred in business organizations, and to obtain the desired results, a methodology is used that combines several strategic aspects, starting from developing the vision to implementing it (Blahová, 2013, p. 44). This is in line with the three aspects presented by the coach and advisor to senior executives, superiors, the best strategic experts in the world (Tony Jeary) and the founder of (Strategic Acceleration Studio) in Dallas - USA. As (Jeary, 2009, pp. 1-2, 124-125) emphasized in his book (Strategic Acceleration) three principles of strategic acceleration (clarity of vision - focus - implementation) as shown in Figure (2), which apply to each activity from Organizational activities, which he called a three-legged model of strategic acceleration, as the three legs work together to achieve a main and common goal, which is to achieve the best results as quickly as possible, based on the fact that time is the most important capital in light of the challenges and pressures facing business organizations, as he sees success as a competition to obtain Fastest and best results.

Figure 2 - Three-legged model of strategic acceleration



Source: Jeary, T. (2009). Strategic Acceleration: Succeed at the Speed of Life: Vanguard, P.125.

2.3. Embedding Knowledge

Embed in the Oxford¹ dictionary refers to the implantation of an idea or feeling to become rooted in a specific context. With the acceleration of developments in the field of business, including the diversity and complexity of business, the importance of knowledge possessed by the human resource has increased because it is the most important factor in the existence and sustainability of business organizations (Al Omari et al, 2020, p. 871). This prompted literary aspects to put forward several concepts of knowledge, including (Davenport & Prusak, 1998, p. 4) description of knowledge as a flexible mixture of experiences, values, information, and expert insight that provides a framework for evaluating and embedding new experiences and information, not only in documents or warehouses

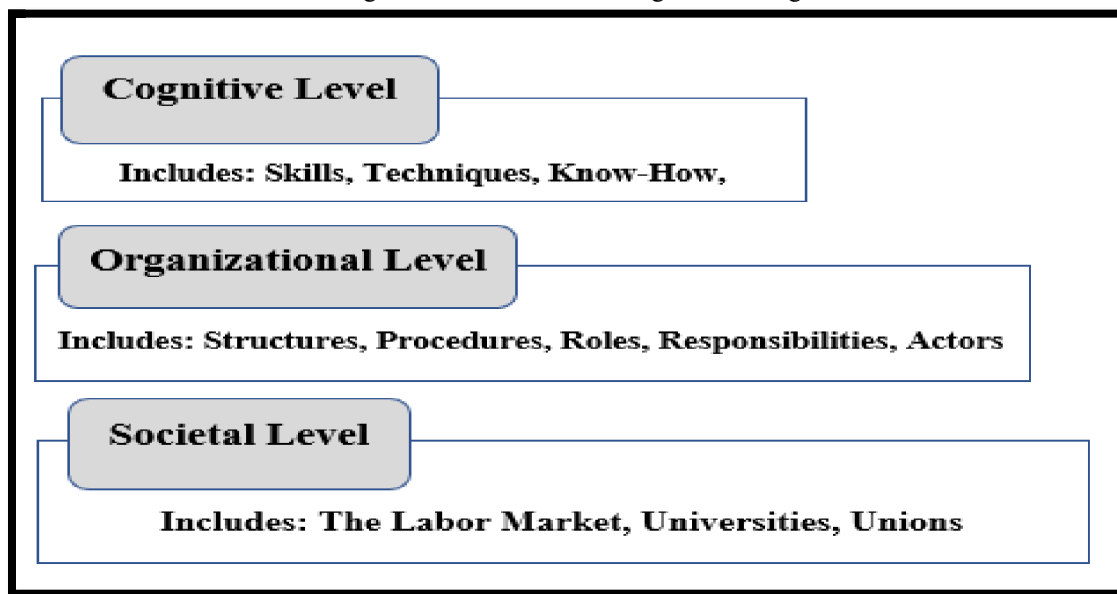
¹<https://www.lexico.com/definition/embed>

but also in organizational routines, processes, practices and standards. This description came to confirm the existence of knowledge contained in the sources that dealt with knowledge. In the course of the discussion about the knowledge contained in the literature, it can be described through three perspectives:

- 1- **The constructivist perspective:** It shows how information is built, and the embedded knowledge resides in the routine (Blackler, 1995, p. 1024). By the same logic (Bourdreau & Couillard, 1999, p. 4), embed knowledge is to make knowledge less dependent on people or groups by including and integrating it into information systems, business processes, and infrastructure, for example buildings, equipment, and basic designs. Embedded knowledge according to (Gamble & Blackwell, 2001) refers to knowledge that is enclosed or fixed in processes, products, organizational culture, routines, structures, and can be found in organizational rules, manuals, codes of conduct and ethics, and is found in explicit sources. For example, a rule can be written In the manual but the knowledge itself is not explicit. That is, it may not be immediately obvious and doing something a certain way will be beneficial to the organization (Akpan, 2015, p. 23), Thamarasseri (2016 p. 5) and (Hajric, 2018, p. 21). However, they must be relevant and important to the system or context in which they are included (Birkinshaw, Nobel, & Ridderstråle, 2002, p. 276). This leads us to the fact that embedded knowledge can be explicit in its form and tacit in its value as noted (M. Purvis & Savarimuthu, 2010, p. 49). It can only be used by the relevant authorities, although it is available to everyone. (Esposito, Esposito, & Jain, 2019, p. 1) approached that as embodied knowledge is fixed in conventions, codes of conduct and ethics, laws, cultures, and experiences, and may be explicit, factual, implied, or empirical, and this embedding can occur By formalizing useful procedures so that they can control and control complex interactions.
- 2- **The social perspective:** It explains knowledge as not something that individuals possess but rather something that they do through practice that links “knowledge” to “action,” meaning that it is not an entity that can be codified but rather is embedded in practice and is not separated from it (Cook & Brown, 1999, p. 387) and (Currie & White, 2012, p. 1335). This is consistent with Badaracco's description (Badaracco, 1991, p. 11) of embedded knowledge as individual and organizational skills that cannot be translated into formulas, computer programs or work but are integrated within social and managerial networks such as information, technology, cost data, plans, judgments about personnel and others. In light of this perspective, embedding knowledge is a continuous social achievement that appears in daily actions and practices (Orlikowski, 2002, p. 249). In the same direction, he went (Currie & White, 2012, p. 1335) to describe embedded knowledge as a social and collective phenomenon. Which (Nicholson & Sahay, 2004, p. 330) sees that it regulates the relationships between individuals and groups and lies in the standards, attitudes, information flow and decision-making methods that shape their interactions with each other and thus are embedded in the context of work through organizational principles and procedures. This knowledge work is increasingly carried out effectively by collaborating with others in teams to accomplish complex tasks in many different contexts (Pyöriä, 2005, p. 121) and (Bosch-Sijtsema & Henriksson, 2014, p. 1).
- 3- **The practice-based learning perspective:** put forward by (Brown & Duguid, 1991, pp. 47-48) and (Lave & Wenger, 1991, p. 38) and (Sole & Edmondson, 2002, p. 7) and focuses on the nature of existing knowledge in the context of what is knowledge that is embedded in the work practices of particular organizational sites and influences participation in concurrent work environments. (Ravichandran & Rai, 2003, pp. 273-274) indicates that embedding knowledge is the process of assimilating individual and collective knowledge into organizational processes. In this regard, it was explained (Nicholson & Sahay, 2004, p. 332) how to include knowledge in the internal environments of organizations and between them within the coordination mechanisms and organizational routine of the organization, which in turn are largely shaped by broader societal institutions. This is consistent with the case (Lam, 1997), which relates to a collaborative project between a British and Japanese company, as the Japanese approach to business design is based on experience and intensity of interaction and its interrelationship with learning by doing, which made it difficult for them to formally write down their ideas. As for the British curriculum, the language of business design at a high level of formality and documentation is the logical and appropriate way they are accustomed to. This difference in the context and organizational routine on which the embedding and transfer of knowledge is based between the two companies has led to differences in the embedding of knowledge and project management. (Lam, 2000, p. 489) extended these ideas by describing how the sources of knowledge embedding can be understood based on the analysis of three levels: The first is the knowledge level where the sources of embedding relate to the implicit nature of knowledge related to skills, techniques, know-how and routines that cannot be easily expressed or explicitly written down, and can be applied in practical settings where the expert watches to prove mentally how things work, the second is the organizational level that focuses on organizational principles of the organization, including coordination structures, behavioral procedures, work-related roles and responsibilities, and

organizational actors, Sources of knowledge embedding include, for example, the coordination structure that determines the organization's ability to integrate and embed different types of knowledge and form the relationship between individual and group learning, as for the third and final level, it is the societal level, as the sources of inclusion show how the broader societal institutions incorporate knowledge. For example, labor markets and universities are working to form organizational procedures and coordination rules, which in turn represent the knowledge base of the organization, as shown in Figure (3).

Figure 3 - Levels of knowledge embedding



Source: Prepared by the researcher based on (Lam, 2000).

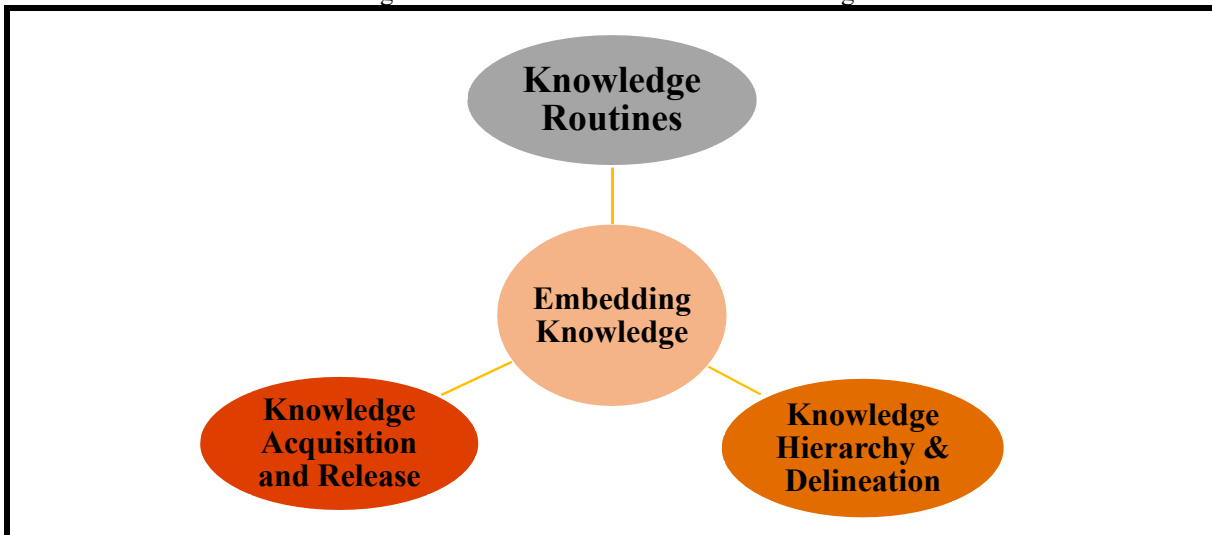
Accordingly, the Embedding knowledge according to the direction of the research is consistent with the constructivist perspective presented by (Blackler, 1995, p. 1024) and (Bourdreau & Couillard, 1999, p. 4) and (Gamble & Blackwell, 2001), and two researchers can provide a definition for the Embed of knowledge. It is the process of integrating and instilling explicit and tacit knowledge derived from competencies and experts through their continuous interactions in operations, routine activities and organizational rules, making them available to all individuals for use in making decisions that add value to the organization's operations.

2.3.1. Dimensions of Embedding Knowledge

Researchers' opinions varied in determining the dimensions of knowledge embedding. In order to determine the available resources and diagnose strengths and weaknesses, the administration needs to organize the knowledge contained in something that can be managed, based on what was presented according to what was stated in the

literature of including knowledge, it can be relied on the dimensions that he put forward (Chun & Montealegre, 2007) as shown in Figure (4) There are four dimensions to organizing embedded knowledge that help researchers identify and describe embedded knowledge, which are as follows:

Figure 4 - Dimensions of embedded knowledge



Source: Prepared by the researcher based on (Chun & Montealegre, 2007).

- 1- **Knowledge Routines:** Routines facilitate individuals and organizations to carry out tasks reliably and effectively within different organizational levels as well as use them to establish and maintain consistent patterns of behavior within the organizational context (Chun & Montealegre, 2007, p. 40). By organizing routine procedures and making their use available to knowledge brokers, knowledge can be structured routinely and practices that make the circulation of knowledge routine through: Expressing knowledge with the support of the context and integration of activities, Acquisition and transfer of knowledge from inside and outside the organization by activating various sources of knowledge, Monitoring and updating activities Networking with the support of empowerment and cooperation (Maier, 2007, p. 204).

2- **Knowledge Acquisition and Release:** Acquisition of knowledge is the process of extracting, compiling, transferring, and transferring problem-solving expertise from experts or documented sources of knowledge to computer technologies, to build and expand the knowledge base and to validate the acquired knowledge using deduction, collection, analysis and modeling (Tomei, 2009, p. 134). The ability to acquire and disseminate knowledge depends on the degree to which knowledge is integrated and organized in an integrated manner. On the other hand, organizations that guarantee knowledge provide their workers with the ability to access and absorb a comprehensive set of diverse knowledge (Chun & Montealegre, 2007, p. 40).

3- **Knowledge Hierarchy & Delineation:** The hierarchy uses centers of power to create and coordinate horizontal and vertical divisions of work, in light of the hierarchy, knowledge is treated as a scarce resource and therefore its decisions are made by specialized functional units at the highest organizational levels (Adler, 2001, p. 216). Researchers in the field of management pointed out the importance of organizations' reliance on a hierarchy, to coordinate several work units within the organization and solve the problems of discrepancy of individual goals as well as coordination, Embedding and control of knowledge. The final is the effect on the intensity of interaction between workers to include and organize knowledge (Grant, 1996b, p. 117) and (Chun & Montealegre, 2007, p. 41). Several studies have discussed the hierarchy of knowledge (Tuomi, 1999), (Braganza, 2004), (Warier, 2005), (Johansson, Parida, & Larsson, 2009) and (Hamilton, Coldwell-Neilson, & Craig, 2014). Their intentions differ in its interpretation, but they agree in presenting the stages of transformation and development of knowledge that began with data, information, knowledge, then intelligence and ending with wisdom. In the same logic, (Landry et al, 2006, P. 598) referred to knowledge as a hierarchy of interpretations related to how it was formed. It is a sequential process of three main transitions (description, processing, translation) and my agency: From reality to data, which is its transition that allows individuals and organizations to develop tools to represent, collect, record and store facts about reality, from data to information, which is its transition that allows data to be processed in meaningful forms, from information to knowledge such as know-how, which is its transfer that allows From the interpretation and translation of information in a form that achieves orientation and actions, and information becomes knowledge only when individuals understand it and apply it in a specific work or practice that is learned from it over time.

However, what we mean here is the hierarchy of knowledge itself according to the organizational hierarchy and its position at the organizational levels. By interpreting the hierarchy of knowledge presented by the above sources in the light of the organizational hierarchy, it can be inferred that each level in the knowledge hierarchy corresponds to a certain level between the organizational levels. The level of data corresponds to the level of lower management, the level of information corresponds to the level of middle management, and the level of knowledge and wisdom corresponds to the level of management Supreme. This is because the data flows in large quantities from the operational work environment and moves towards the middle management to take the form of meaningful texts indicating information that can be interpreted, and if it is interpreted and placed in contexts and procedures by specialized agencies in the upper management, knowledge is formed that results in making critical decisions with an impact. Direct in the organization's strategy and decisions that are reflected in its competitive position in the work environment. Based on the foregoing, it can be said that the hierarchy of knowledge and its demarcation is intended to define knowledge and delineate its boundaries and those who precede those in knowledge transactions based on interaction in organizational activities.

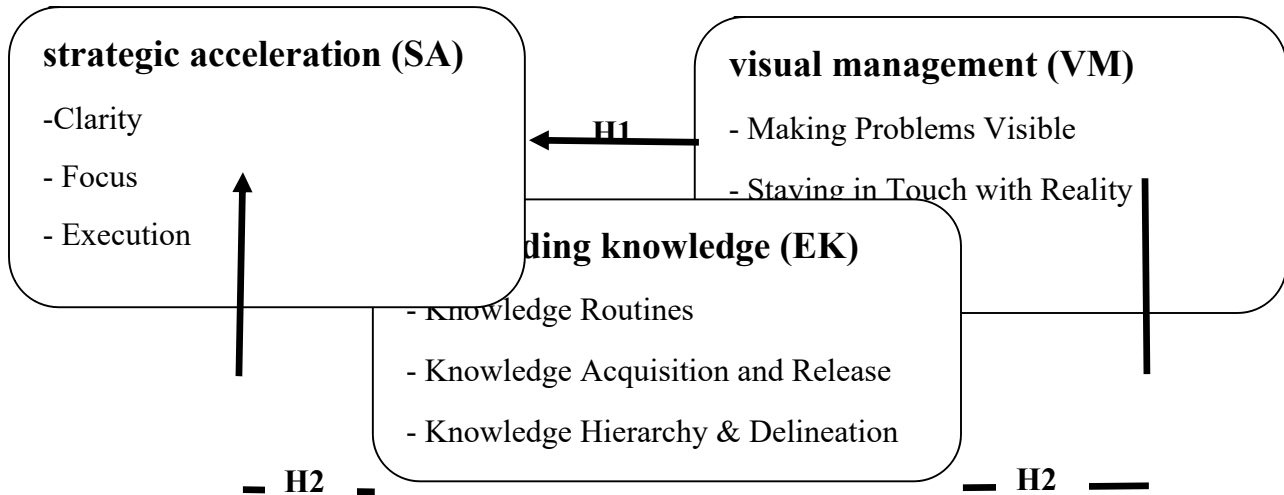
3. **Research Conceptual Model**

The research model shown in Figure (5) shows the type of relationships between its variables and their direction, as visual management (VM) represents an independent variable and strategic acceleration (SA) is a dependent variable, while knowledge embedding (EK) plays the role of the mediating variable. The main hypothesis is that visual management influences strategic acceleration, and this effect is increased through the Embedding of knowledge. The visual management was measured based on the ideas contained in the model (Imai, 2012), whose sub-dimensions were: visual manifestation of problems, continuity of communication with reality, and setting goals. While the strategic acceleration was measured based on the model (Jary, 2009), which consists of three sub-dimensions: clarity of vision, focus, and implementation. As for the knowledge embedding variable, it was measured based on a study (Chun & Montealegre, 2007), which clarified three dimensions: knowledge routine, knowledge acquisition and dissemination, knowledge hierarchy and demarcation. This model assumes that visual management, through its dimensions, influences strategic acceleration. It is possible to increase this influence through the Embedding knowledge. Thus, the research hypotheses are as follows:

H₁: Visual management positively affects the strategic acceleration of the Iraqi oil companies.

H2:The positive impact of visual management on strategic acceleration increases by mediating the Embedding knowledge in the Iraqi oil companies.

Figure 5– Research Conceptual Model



3.1. Methodology

3.2. Population and Sample

The Iraqi oil companies are the main axis supporting the national economy, the requirements of the research apply to them in terms of their practice of visual management and their need for strategic acceleration in their process. Where the number of productive oil companies operating in Baghdad (3). Given the nature of research variables that require higher administrative levels, the number of individuals in them reached (933) representing the research community. By applying equation², the sample size was (163) individuals, and (151) questionnaires ready for statistical tests were reached.

3.3. Instruments

3.3.1. Questionnaire

The questionnaire was adopted as the main research tool for data collection, and it was designed based on several models (which were mentioned in the research model). While they were formulated according to a five-response Likert scale, the response scores varied as follows: Fully Agreed = 5, Agreed = 4, Neutral = 3, Disagree = 2, Not Totally Agreed = 1.

3.3.2. Statistical methods

Through the (SPSS) and (AMOS) program, (Cronbach's Alpha) was used to verify the integrity of the research tool and its ability to achieve the research objective. Multiple regression coefficient to test hypotheses of the effect between variables.

4. Results and Discussion

4.1. Preliminary Tests

We performed some preliminary tests to analyze the research hypotheses, including the internal consistency test and the variance inflation factor (VIF) and the results are presented in Table (1).

Table 1 - Cronbach's alpha & Variance Inflation Factor Analysis

Variables	Cronbach's alpha	VIF
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²<https://www.calculator.net/sample-size-calculator.html>

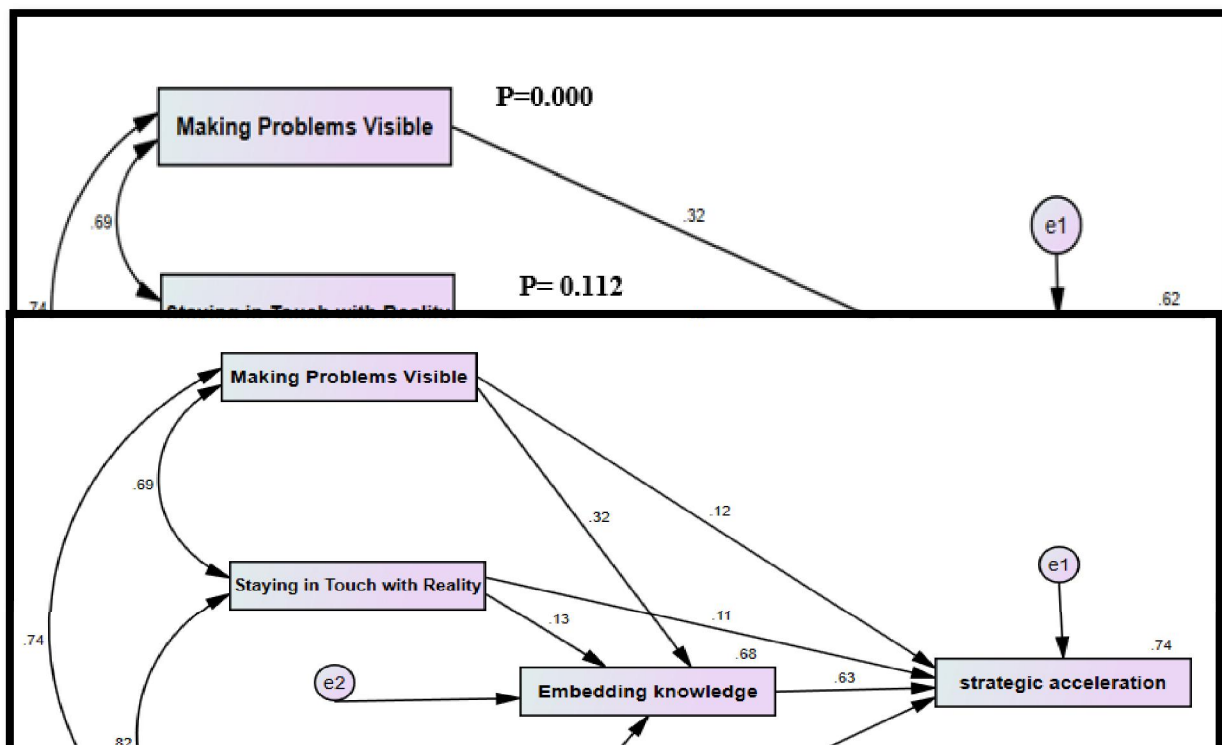
Visual display	0.752	2.673
Continuity of communication	0.857	3.347
Setting goals	0.834	4.342
VM	0.898	
Clarity of vision	0.903	
Concentration	0.918	
Execution	0.907	
SA	0.942	
knowledge routine	0.855	
Knowledge Acquisition and dissemination	0.881	
Knowledge hierarchy and delineation	0.774	
EK	0.868	
The whole model	0.930	

Table 1 shows that Cronbach's alpha values were all acceptable, and ranged between (0.752 - 0.942), which is evidence of the validity of the research tool for measuring its objectives. In addition, it turns out that all coefficients of the variance inflation coefficient have values less than 5, which means that the data is free from the problem of multi-linearity, and therefore the data is valid for regression analysis.

4.2. Hypotheses Analysis

The research hypotheses were tested and analyzed based on the structural equation modeling design using AMOS v.24 to show the impact of visual management on the strategic acceleration of oil companies as a first experiment, and then determine the change in this effect by entering the embedding knowledge as an intermediate variable in the second experiment. Figure (6) and (7) show the influence pathways within the model.

Figure 6 - The first hypothesis shows the effect of visual management on strategic acceleration



As For the first hypothesis test, Figure (6) shows that visual management positively affects the strategic acceleration of oil companies. Where the value of the coefficient of determination is (R^2) (0.62), which means that visual management explains (62%) of the variance in the strategic acceleration of oil companies, which is a high interpretation range that indicates the significant positive impact of what visual management does in oil companies on strategic acceleration in its operations. This effect is the result of two dimensions, namely, the visual manifestation of problems and setting goals, while continuous communication with reality had no effect on achieving strategic acceleration. The value of the benchmark beta coefficient was at the highest level (0.35), which describes the effect of setting goals on strategic acceleration, which means that setting goals has the most important effect in achieving strategic acceleration in oil companies.

As for the second hypothesis test, as in Figure (7), it was found that the embedding of knowledge has a mediating and positive role in the impact of visual management on the strategic acceleration of oil companies. This result is confirmed by the value of the coefficient of determination (R^2), which reached (0.74) with a difference of (0.12) from its value in the first hypothesis, which means that oil companies can achieve strategic acceleration better if they adopt the process of embedding knowledge in their practices.

It can be seen the absence of a moral effect on the strategic acceleration caused by the visual management through all its dimensions, as it reached ($P = 0.078; 0.144; 0.448$) respectively, and this confirms the nature of the overall mediation of the regression model. Therefore, we find that the overall effect of the visual management in strategic acceleration is through the influence of the mediator, described by knowledge embedding, which amounted to (0.630). Accordingly, the embedding of knowledge through its mediating role has contributed to increasing the impact of visual management in its dimensions in strategic acceleration.

5. Conclusions

Several concepts have developed in the era in which visual management emerged, such as continuous improvement, visual work site, and gamba kaizen. However, the (VM) has gained privacy in organizations that operate in environments characterized by high risk and overlap in their operational processes that led to an escalation of problems and the need for treatments in a way. Continuous. In view of the capabilities and facilities it offers in business management, it has achieved an important position on the business level. It has become one of the modern and decisive administrative methods in developed countries, and interest in it has withdrawn in developing countries. If they want to keep pace with global developments and compete with major companies, for example, Aramco, which is at the forefront of oil companies in terms of market value, Exxon Mobil and Chevron, business must be managed in modern ways. This is what visual management provides. Visuals include everything that surrounds us and can be explained through sight (colours, shapes, events, tools, ... etc.) and the eye sees everything, but it can only be controlled by managing what can be seen and visualized. In light of the developments and acceleration witnessed by the world, the current research came in an attempt to establish an entrance that explains and analyzes the acceleration of activities and tasks strategically and provides a model that paves the way for future studies in this direction.

Based on the value derived from knowledge management that has brought about a shift in the business world, the most recent of which is the shift from the traditional economy to the knowledge economy that depends directly on

the production, distribution and use of knowledge. Despite the broad agreement on the importance of embedding knowledge, its contribution to strategic acceleration is still not clear, in addition to the intellectual debate about the mediation of embedding knowledge to achieve strategic acceleration has not reached a point of agreement. Therefore, the research tried to reveal this relationship, as the visual management had a positive impact on the strategic acceleration of the oil companies. Additionally, these companies' adoption of a knowledge embedding process enhances the positive impact of visual management on strategic acceleration. Therefore, we support the academic aspect that emphasizes the positive role of embedding knowledge. We suggest studying the research model in the future on different sectors to diagnose areas of benefit from it.

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