

## **BUILDING THE VISUAL MANAGEMENT: A COGNITIVE APPROACH**

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### **Abstract:**

The concept of Visual Management (VM) has become an essential discipline for managers today. The practice involves communicating with images, organizing and directing work through visual solutions, and creating clear graphic depictions of complex ideas. However, some researchers look to (VM) as a tool which evolved to an operation level where its concept can be applied throughout an organization as a cognitive approach. In particular, the cross a cognitive dimensions integration of (VM) in various systems like evolution, behavior, resources and learning organization that can provide continuous improvement and sustain a source of differential advantage for the organization.

The purpose of this paper is an attempt of developing a framework that building system in a whole while of the organization a cross a cognitive dimensions, and express the system context that contribute to the effectiveness of the system works on the a whole of organization. The methodology of the study based on a review of studies and Literature review to build visual management that the dimensions integration needed to implementation of (VM) that leads to improve an organization's all over efficiency, quality, flexibility and innovativeness. Finally, the application such framework may helps the organization to achieve the potentially to the acquisition of competitive advantage, and perhaps, to world-class status.

**[Keywords] Visual Management, A cognitive approach, Evolution dimensions, Behavior dimensions, Resources dimensions and Learning organization dimensions**

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## Introduction

Business institutions seek the best practices to improve the various performing indicators to boost its competitive position. The term “Lean” or “Lean production” was first used by MIT researchers in the 1990’s to describe the unique manufacturing approach of the Toyota Production System (TPS). The TPS is a sophisticated system of production consisting of different elements, all of which contribute to a whole philosophy. Visual Management is one fundamental element of the Toyota Production System (TPS). The main discussions on VM and Lean in construction are presented in the Lean Construction related papers (Denise, 2012)

Admittedly, Visual management has become an essential discipline for managers today. The practice involves communicating with images, organizing and directing work through visual solutions, and creating clear graphic depictions of complex ideas—for example, to enable workers to see how their work fits into a value stream flowing directly to customers. (Ehrenfeld, 2016)

Thus, Visual Management has been evolving and effectively employed in some manufacturing and service organizations for a long time.

Galsworth (2014) viewed the ideal process has been defined as one that is able to meet customer demand, is error free, flows without delay and where everyone can see how well the process is operating. In busy, dynamic work environments, processes flow more smoothly when everyone can see how the process is working in real time.

We can infer that the Visual Management is a management system that attempts to improve organizational performance through connecting and aligning organizational vision, core values, goals and culture with other management systems, work processes, workplace elements, and stakeholders, by means of stimuli, which directly address one or more of the five human senses (sight, hearing, feeling, smell and taste) (Tezel, et al 2011). As such, cognitive science can provide powerful insight into human nature, and, more importantly, the potential of humans to develop increasingly powerful information technologies. (Stephen, 2005)

To more understand the concept of the visual Management and application in organization we proposed this concept as cognitive approach

Garoui and Jarboui(2012) urge the common cognitive theory has it that value creation comes from knowledge the source of value creation is linked to elements difficult to imitate and which provide a significant competitive advantage and sustainability. The determinants of value creation as approached by the cognitive theories are of sociological and psychological origin.

## **LITERATURE REVIEW**

As we show this study is a cognitive approach where Lindlof (2014) investigation the effects of visualization from a human cognitive perspective is a well-populated research area, studies show that it plays an important role for central cognitive processes that help us function as thinking and communicating humans, cognitive function as Information processing capacity, Identifying patterns, Memory, Learning, Problem solving, Reasoning, Comprehend verbal information

Garoui and Jarboui (2012) contend that a cognitive approach attaches more importance to the contribution of intellectual capital in creating value. The cognitive theories include current behavior, evolutionary theory, and the theory based on resources and expertise.

Jaca et,al (2013) show that (Liff and Posey 2004) said VM adds a new dimension to the processes, systems and structures that make up an existing organization by utilizing strong graphic visualization techniques to heighten the focus on performance

In fact, the success of visual management is usually linked to process improvement philosophies and particularly the philosophy associated with lean operations In other words, the principles established for visual management by the practitioner community tend to be substantiated in terms of anecdotal cases of apparent good practice, rather than in terms of some foundations established in academic theorizing, which open up avenues of empirical investigation. (Access may, 2016)

Further, Galsworth (2014) *Visuality and Lean are Equal Partners*. Visuality, on one hand, builds operational information into the physical work environment, enabling people and machines to work with greater precision because they are each increasingly self-regulating. Lean, by contrast, defines and directs the flow of work that visual spells out, dramatically reducing lead-time and flow distance. Visual partners closely with lean by imbedding improvement gains into the physical workplace. Like two wings of a bird, visual and lean need each other—in equal and balanced synergy. Neither is more important; they are of equal importance.

Jaca et,al (2013) commend that There are basically three types of guidance systems of Visual Management: those focused on output (usually tied to incentive systems that are tied to historical information); those focused on employee behavior (policies and procedures formally established by the company); and those focused on social coordination (informal structures that ensure desired behavior)

Denise (2012) comments that Galsworth (2005) proposed an application framework for VM in manufacturing consisting of four main levels: visual order, visual standards, visual measures and visual guarantees. Visual order is the foundation level and refers to the 5S concept of systematically cleaning, organizing and standardizing the workplace. Visual standards focus on providing workers with visual information to support their tasks. Visual metrics is the preceding level which focuses on creating transparency of metrics for the workplace as a whole so that abnormalities are highlighted and corrective action can be taken. Finally, the visual guarantee refers to reducing human error to a minimum by introducing visual controls (for example floor markings) and poke yoke (mistake proofing device).

Tezel, et al (2011) have reviewed The Functions of Visual Management as

- Transparency: The ability of a production process (or its parts) to communicate with people
- Discipline: Making a habit of properly maintaining correct procedures
- Continuous Improvement: An organization-wide process of focused and sustained incremental innovation
- Job Facilitation: Conscious attempt to physically and/or mentally ease people's efforts on routine, already known tasks by offering various visual aids

- On-the-Job Training: Learning from experience or integrating working with learning
- Creating Shared Ownership: A feeling of possessiveness and being psychologically tied to an object (material or immaterial)
- Management by Facts: Use of facts and data based on statistics
- Simplification: Constant efforts on monitoring, processing, visualizing and distributing system wide information for individuals and teams
- Unification: Partly removing the four main boundaries (vertical, horizontal, external and geographic) and creating empathy within an organization through effective information sharing

Thus, Jaca et,al (2013) contends that the academic literature shows that VM should be used as an integral management system to guide the company in its journey of continuous improvement. Through the use of visual tools and techniques, the company creates a powerful and effective guidance system for production and improvement. These guidance systems will align, direct and stimulate all employees in the factory, increasing their capacity to make decisions and fostering their involvement in the continuous improvement activities that the company needs to systematically address in order to succeed.

Further, Visual control goes beyond capturing deviations from a target or goal on charts and graphs and posting them publicly. (Liker, 2004)

The Visual Management Pyramid as Maurice (2012) show: three levels:

The first: 6S/Workplace organization is at the base of the visual management pyramid.

The next step on the pyramid is Visual display, which involves display of information and standards.

The highest level on the Visual management pyramid is Visual Control, which involves the use of visual signals to monitor and control production.

In essence, the visual management literature argues that there are four main types of visual device, a visual indicator is seen to provide or share messages with receiving actors, but it is passive. A visual signal also provides a certain message to a receiving actor, but in this case there is an expectation that the receiver takes attention and reacts to the message. Visual controls attempt to impact upon the behavior of the receiver directly by building the message into the

physical environment itself – ‘the physical structure of the device sends the message’ Visual guarantees are also known as mistake-proof, fail-safe, or Poka-Yoke devices. ‘A visual guarantee is designed to make sure that only the right thing can happen. It prevents us from doing the wrong thing ([www.peoplel.eny.unimelb.edu.au](http://www.peoplel.eny.unimelb.edu.au))

Arguably, Visual controls at Toyota are integrated into the process of the value-added work. The visual aspect means being able to look at the process, a piece of equipment, inventory, or information or at a worker performing a job and immediately see the standard being used to perform the task and if there is a deviation from the standard. (Liker, 2004)

In fact, many of the tools associated with lean production are visual controls used to make visible any deviations from the standard and to facilitate flow. Examples include kanban, the one-piece-flow cell, andon, and standardized work. (Liker, 2004)

Tonkin (1998) point out Among Greene’s suggestions for building an effective visual workplace: All change is difficult, but experience has shown that it’s necessary in most cases; there is never an ideal time to make changes Don’t tell people changes are going to be made unless you really plan to implement them Make goals ““meet able” and “beatable”” Allow for fine tuning Management by walking around is good; encourage and keep up with employees’ progress.

Wiley Periodicals, Inc. (2015) show the Key principles to Building the (VM) include:

- Engaging stakeholders: The actual process operator(s) or owner(s) need to participate in designing the approach to and mapping of these processes.
- Allowing the team the flexibility to design their process and tools to fit their activities, personalities, and cultures while not losing focus on the actual deliverable.
- Using layering processes to provide sufficient detail to understand the workings or gaps within a process.
- Using Kaizan or Lean Events to implement the process.
- Using dynamic mapping processes to address highly variable activities. The new key principle that should be added to those already listed is as follows:
- Leveraging existing process mapping tools that are already in place within the organization.

**Importance and Objectives of the Study:**

The term cognitive refers to perceiving and knowing, and cognitive scientists seek to understand mental processes such as perceiving, thinking, remembering, understanding language, and learning (Stephen, 2005)

Jaca et,al (2013) show that According to Kobayashi, VM plays a central role in many of the 20 keys for improving the workplace. These keys are: cleaning and organizing, improvement team activities, quick changeover technologies, value analysis of manufacturing operations, coupled manufacturing, maintaining machines and equipment, quality assurance systems, eliminating waste with a 'treasure mountain map', empowering workers to make improvements, skill versatility and cross-training, production scheduling and efficiency control.

Thus give the importance of this study is an attempting to build the visual management as a cognitive approach dominating at organizational strategic level in competitive environment. Accordingly, the study aims to consider three points; a) clarifies the concept of the visual management as a cognitive approach and the its application all over the organization; b) identify the context and content for applying this approach in organization; and c) build the framework the proposed visual management as a cognitive approach to gain functional activities to improvement the communications and reduce all kinds of waste and cost that achieve competitive advantage

**The Conceptual Framework:**

Cognitive theory is borne from the relatively new interdisciplinary field of cognitive science. Cognitive science studies the nature of the mind by drawing from research in a number of areas including psychology, neuroscience, artificial intelligence, computer science, linguistics, philosophy, and biology. (Stephen, 2005)

Thus Lindlof (2014) contends that within research on human cognition, visualization plays an important role for central cognitive functions such as finding patterns , problem solving, reasoning and memory Visualization can also play an important role in efficient knowledge transfer

Tezel, et al (2011) show that (Liff and Posey, 2004) said In the organizational world Visual Management is a management system that attempts to improve organizational performance through connecting and aligning organizational vision, core values, goals and culture with other management systems, work processes, workplace elements, and stakeholders, by means of stimuli, which directly address one or more of the five human senses (sight, hearing, feeling, smell and taste

Tonkin(1998) point out Visual Management Give people a clear idea of performance targets and the means to determine what to do — and when and how; provide the materials, information, and machines they need to do the work; and empower them to go forth and be excellent.

In fact, visibility is a language—an imbedded system of information detail. Its purpose (among many many other things) is to capture and make functional the elements of your current operational system. This is as true in health care and offices as it is in manufacturing, food processing or an open-pit mine. On its most effective level, the visual workplace allows you and your company to see how you think—and where the gaps are. I call these gaps information deficits and they are barely visible on their own. To find them we must look for their symptom: motion/moving without working. (Galsworth, 2014)

Visual Management (VM) as (Liff and Posey, 2004) show using visual aids to improve processes and communication and promote continuous improvement. It makes abnormalities visible so that corrective action can be taken and it enhances communication by making information easily accessible in a production setting (Denise, 2012)

As Maurice (2012) show that Visual management is defined as a set of techniques for creating a visual workplace, embracing visual communication and control throughout the work environment

Galsworth (2016) defined A visual workplace as a self-ordering, self-explaining, self-regulating, and self-improving work environment where what is supposed to happen does happen, on time, every time, day or night—because of visual devices.



Jaca et,al (2013)comment that there is a lack of common terminology when describing the use of visual methods to support management throughout an organization. Some of the terms used are Visual Management (VM), visual workplace, visual control, visual factory, shop-floor management, visual tools and visual communication.

According to Visual Management (VM) experts Stewart Liff and Pamela Posey, VM is a management system that adds “visual depth and consistency to an organization’s messages about its mission and goals.” It does this by “converting information about the company, its customers, and its performance into graphic displays which cannot be ignored ( Raab)

Visual devices and systems are the words and grammar of your new imbedded language. The result is a workplace that speaks —whatever the venue—along with dramatic increases in productivity, quality, safety, and the satisfaction of employees and customers alike. (Galsworth, 2016)

Tezel, et al (2011) comments that one clear point from the literature is the lack of common terminology in this field. Some used terms, that refer to more or less the same concept, are Visual Management, visual workplace, visual control, visual factory, shop floor management, visual tools and visual communication, misuse of the terms is a common practice.

Lindlof (2014) show that the cognitive benefits of visualization can support managerial tasks and that visual management can play a role in supporting communication between individuals. In his thesis argues that visualizations trigger and support the teams’ information processing capability through an improved overview together with the use of rich, synchronous and frequent communication using non-canonical boundary objects based on real-time information.

Further, Benefits of Visual Management as Maurice (2012) show that: Facilitates employee autonomy: Serves to eliminate waste, Fosters continuous improvement

Allows for quick response & recovery, Leads to information sharing, Exposes abnormalities, Maintains gains

This corresponds to both Jaca et,al (2013) notion of benefits of VM helps stimulate employee involvement throughout the entire organization, serving as a base for continuous improvement and leading to greater sensitivity to customer needs, overall enhancement of customer satisfaction, improvement in the knowledge and skills of employees, increased employee satisfaction and increased employee commitment and participation they show that (Liff and Posey 2004) said performance results are more transparent, gaps in processes are easily identified and addressed more quickly and attention to rework, scrap production and other wastes are facilitated, along with other non-value-added activities.

Galsworth (2014) has reviewed It is not just operators that build visual performance by applying those questions. Everyone does. From operators to CEO, from engineer to supervisor, from marketing to field rep, from purchasing to planning. In a fully implemented visual workplace, employees across all functions create visual devices that allow their actual work to speak—through benches, tools, boardroom furniture, floors and hallways, computers and phones.

VM can take a variety of visual forms, including historical displays, information headquarters or “war rooms”, colorful banners, project boards, instructional posters, employee profiles, photographic exhibits, and digital signage. Visual management expands the scope of internal and external communication, engages employees, boosts performance, and brings an organization’s mission to life. ( Raab)

Galsworth (2014) in her paper explicate the ten Doorways for creating a workforce of visual thinkers as: **1:** Operators own and implement 5S.**2:** Engineers, managers, and supervisors are responsible for visual standards.**3:** Supervisors, planners, and managers develop visual displays and visual scheduling boards in order to address their **4:** Executives embrace visual leadership—ensuring measures are visually in place, visual problem-solving is active and effective in day-to-day work. **5:** Managers, supervisors, planners, and materials handlers put visual pull systems in place for the timely.**6:** Quality staff and engineers teach and coach the spread of visual guarantees. In **Doorway 7**, the above six core visual methods are applied to the machine, led by the maintenance staff: the result is a machine that speaks/The Visual Machine **8** applies those same six core methods to admin and other office functions and a Visual-Lean Office is created.

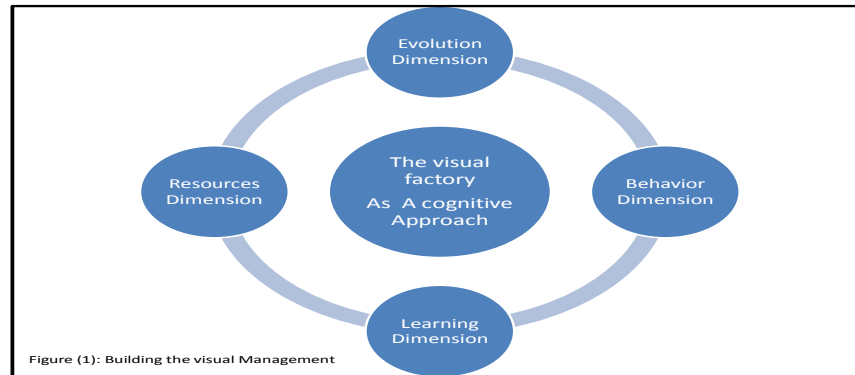
9 calls for a Visual Macro Team to develop visual linkages between organizational functions. 10 target the advanced outcome of spreading high-functioning visuality across multiple sites and throughout the supply chain through the Visual Exam/Matrix process.

Raab command that In their 2004 book Seeing is Believing, VM experts Liff and Posey relate six phases of actions that will help any organization successfully implement a VM strategy: Phase 1 – Planning, Phase 2 – Build a Framework, Phase 3 – Create the Space, Phase 4 – Focus on Customers and Data, Phase 5 – Focus on Employees, Phase 6 – Constantly Renew and Revitalize the Process.

Denise(2012) show that: The importance of implementing broader solutions as opposed to isolated tools was considered by Picchi et al., who stated that “when tools are implemented in isolation, poor implementations of lean concepts are observed Galsworth (2015) point out the most people do not understand the tremendous power of workplace visuality, she add that This is not just a mistake in thinking; it is the loss of a huge improvement opportunity.

### **Methodology of the Study:**

As we pointed out that the concept of Visual Management (VM) has often been considered a preserve of manufacturing tools. However, the philosophy has evolved to a strategic level where the concept can be applied throughout an organization. In particular, the dimensions integration of evolution, resources, behavior and learning organization can provide continuous improvement and sustain a source of differential advantages for organization. And, the core factors like cost, quality, customer satisfaction, and more are some important issues facing organizations. There are searching continuously for innovative ways to contain costs without sacrificing quality and meet the customers’ needs. So, the methodology of this study based on a literature review to develop the proposed framework for building the Visual Management as a cognitive approach in the organization across all core functions. The components of proposed framework Visual Management integrated wheel are the internal and external environment of the organization and the core dimensions of a cognitive approach in the organization. These dimensions are evolution, resources, behavior and learning organization. Figure (1) show demonstrates the proposed framework of building the visual management as a cognitive approach.



### **The visual management as a cognitive approach:**

Galsworth (2014) has reviewed the visual workplace represents a discrete set of methods, tools, and visual outcomes that comprehensively convert the physical environment into a visual one. Though many of these technologies will be familiar to you, what may be new is thinking about them as a single line logic and an integrated framework that shares a common purpose: to share vital information about the task at hand at-a-glance, without speaking a word—in short, to let the workplace speak. And that outcome succeeds most completely if that workplace has created a workforce of visual thinkers—a workforce of is, individuals on every organizational level who have learned how to think visually.

Jaca et,al (2013) command that visual management as company guiding systems as focused on output, focused on employee behaviors and focused on social coordination

Galsworth (2014) contends that workplace visibility is a system first, more than that; it is a system of systems. She add More often than not, an effective implementation of operator-led visibility produces a 15%-30% increase in productivity on the cell or departmental level, beginning with the implementation of the visual where. (Or, as our trainers like to title it: 5S on Steroids). But that effectiveness and those impressive results require that management not take shortcuts.

In this study present that visual management as a system complements of four dominations such as evolution, resources, behavior and learning organization as follow show

### **The Evolution Dimensions:**

In this study the author presents the evolution dimension as a system component of continuous improvement, Kaizen and mistake-proofing this model concocts from the academic literature review.

Most of the manufacturing industries are currently encountering a necessity to respond to rapidly changing customer needs, desires and tastes. For industries, to remain competitive and retain market share in this global market, continuous improvement of manufacturing system processes has become necessary.

Likers (2004) in his study show the principle 2: Create Continuous Process Flow to Bring Problems to the Surface point out: If some problem occurs in one-piece flow manufacturing then the whole production line stops. In this sense it is a very bad system of manufacturing. But when production stops everyone is forced to solve the problem immediately. So team members have to think, and through thinking team members grow and become better team members and people.

Denise (2012) has reviewed uses visual aids to improve processes and communication and promote continuous improvement

Kaizen means improvement, continuous improvement involving everyone in the organization from top management, to managers then to supervisors, and to workers. In Japan, the concept of Kaizen is so deeply engrained in the minds of both managers and workers that they often do not even realize they are thinking Kaizen as a customer-driven strategy for improvement

This philosophy assumes according Imai that ‘‘our way of life – be it our working life, our social life or our home life – deserves to be constantly improved’’.(Thessaloniki ,2006)

As Singh and Harwinder (2009) show the Competition and continuously increasing standards of customer satisfaction has proven to be the endless driver of organizations performance improvement.

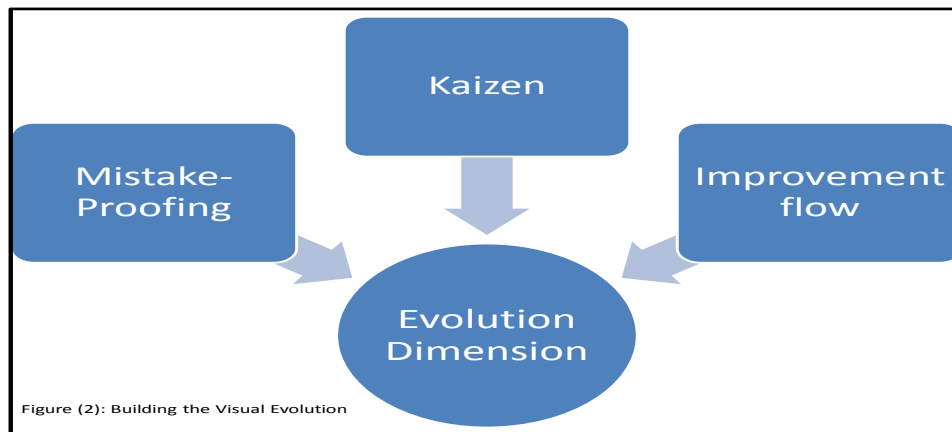
Thessaloniki (2006) point out Kaizen is a Japanese philosophy for process improvement that can be traced to the meaning of the Japanese words ‘Kai’ and ‘Zen’, which translate roughly into ‘to break apart and investigate’ and ‘to improve upon the existing situation’. The Kaizen Institute defines Kaizen as the Japanese term for continuous improvement. It is using common sense and is both a rigorous, scientific method using statistical quality control and an adaptive framework of organizational values and beliefs that keeps workers and management focused on zero defects. It is a philosophy of never being satisfied with what was accomplished last week or last year

Such Likers (2004), ways of the thinking a good place for any company to begin the journey to lean is to create continuous flow wherever applicable in its core manufacturing and service processes. Flow is at the heart of the lean message that shortening the elapsed time from raw materials to finished goods (or services) will lead to the best quality, lowest cost, and shortest delivery time. Flow also tends to force the implementation of a lot of the other lean tools and philosophies such as preventative maintenance and built-in quality (*jidoka*). A lean expression is that lowering the water level of inventory exposes problems and you have to deal with the problems or sink. Creating flow, whether of materials or of information, lowers the water level and exposes inefficiencies that demand immediate solutions. Everyone concerned is motivated to fix the problems and inefficiencies because the process will shut down if they don t. Traditional business processes, in contrast, have the capacity to hide vast inefficiencies without anyone noticing people just assume that a typical process takes days or weeks to complete. They don t realize that a lean process might accomplish the same thing in a matter of hours or even minutes.

Martin (2016) has reviewed the defects caused by mistakes and defects caused by excessive variation.

In other article (2016) the author show the first step in achieving great quality is a clear understanding of the link between mistakes and defects. The second step is to know how to completely eliminate the defects caused by mistakes. When we transform our thinking, we transform ourselves—and fairly fast. Only then can we pursue a highly-effective approach to attaining perfect quality.

Figure (2) show the model of evolution dimension to building the Visual Management.



### The Behavior Dimensions:

The second dimension of framework this study is behavior dimension. It include Transparency, Simplification and Discipline. The author building the model from academic literature review In the (Jaca et,al ,2013) investigation the characteristics of visual elements as visual behavior: transparency, self-explaining, evoking, increase efficiency , common access and constant reminders.

Tezel (2011) identifies one of the functions of Visual Management as the creation of transparency. In this research, Visual Management is approached as a management strategy for organizational improvement, control and measurement which uses visual aids to externalize information and improve communication and transparency in the workplace.

Denise(2012) show that Formoso, et al defines transparency as “the ability of a production process to communicate with people” and this can be achieved by visualizing the main process flows from beginning to end, through organizational and physical means, measurements and public display of information the authors add the Visual tools and methodologies can increase transparency on a construction site, reduce information processing time and human errors, add different layers of information on workplace elements and promote self-management

Transparency aids communication and decision making and is necessary to support a holistic view of an organization.

Martin (2016) contends that although simplifying products and processes can achieve remarkable reductions in mistakes and associated defects, this approach cannot completely eliminate mistakes or defects.

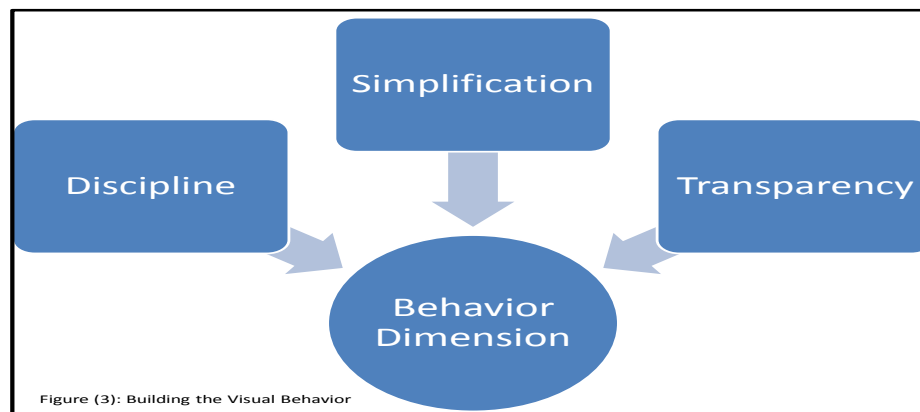
Galsworth (2015) show that Standards that support the visual workplace are specifications or requirements that make the visual part of our work environment work even better.

Tezel, et al (2011) defend the Simplification as Constant efforts on monitoring, processing, visualizing and distributing system wide information for individuals and teams

Martin (2016) contends that to eliminate defects profoundly important and reflects the three parts of our SMS Method: Simplify, Mistake Proof, and Set. Let's look at simplify first and the direct cause-and-effect link between the complexity of a task, mistakes, and defects. FACT: Simplifying products and processes always achieves an immediate, direct, and proportional reduction in defects—and, in doing so, saves huge amounts of cost, time, and effort.

Tezel, et al (2011) defend the Discipline as Making a habit of properly maintaining correct procedures

Figure (3) show the model of behavior dimension to building the Visual Management.



### **The Resources Dimensions:**



The next dimension of framework this study is recourse dimension. It includes leadership, employees and technology. The author building the model from academic literature review

Galsworth (2016) caution that: No improvement paradigm can take you any distance to enterprise excellence if it has not taken into account and addressed those three factors: Separating time for improvement from production time; sharing power with value-add associates—the power to think, invent, and implement; and developing a new role for supervisors, so they become, as I put it, leaders of improvement.

As (Jaca et,al ,2013) stimulate employee involvement in visual management as: empowerment, motivation and aligned vision.

Galsworth (2016) show that the purpose of the principles and practices of visual leadership—the very wide doorway under discussion this week in *The Visual Thinker*—is to transform those who now manage into those who will lead. To do this, you need to do more than simply chase down information, monitor KPIs, submit reports, and show up for meetings. You need to change your job description, and in the process, change yourselves. Fire the boss that you are—and hire a new one. You need to transform your identity. And identities shift only when we see and understand ourselves differently.

Jaca et,al (2013) show that: The Visual tools & techniques as: 5S, charts, VSM, andon lights, pictures, visual controls, kanban, layout diagrams, Digital display panels, Differentiating walkways and charts.

Galsworth (2014) has explicated Visual thinking principles for the office are identical to those followed by the shop floor as: Office people are used to groups. People in offices are used to getting their work done in a group context, not in isolation from others. In offices, working in groups, if not in teams, is the norm. Office people own their work. People in offices feel a greater sense of ownership over their jobs. They understand how pieces fit and recognize what they contribute to the whole much more readily than production personnel. Office people are more self-supervising. Office personnel are used to more self-regulation. While some may require

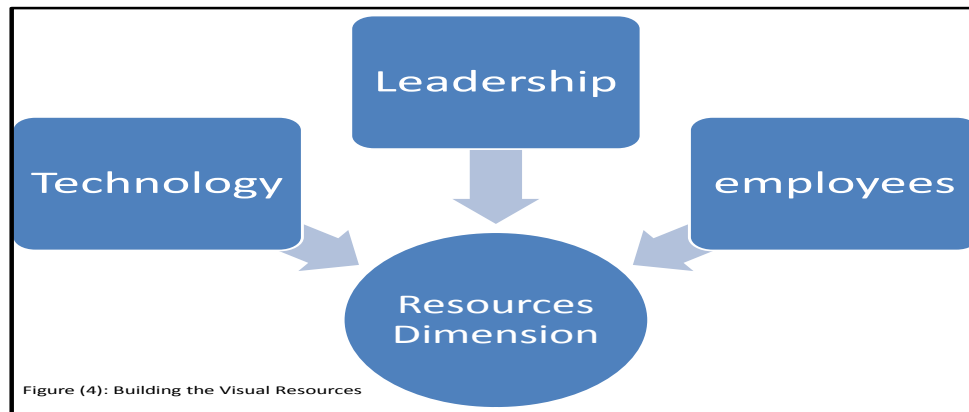
some guidance on tasks, few need help on skills. The educational sequence that lands me an office job is, more often than not, similar to (if not identical with) that for other office personnel. Office people protect their territory. Who hasn't heard offices called "small kingdoms?"—usually said with some venom. "Don't touch my desk" is my own constant instruction around the office. I have a huge sense of ownership over those piles and respect that need in others.

(Kifaya and AL- Ali(2016) commend that building a lean system organization requires rearrange the organization's structure map , forming the work cells ,focusing on completing the tasks , and developing of multi-functional work teams. On the other hand, work teams in a lean organization has the following characteristics a good adaptation speed and an effective communication skill between its members with the ability to exchange work sites among them ,they also characterize as individuals who enjoy different skills and able to share their knowledge among each other .

Visual control is any communication device used in the work environment that tells us at a glance how work should be done and whether it is deviating from the standard. It helps employees who want to do a good job see immediately how they are doing. It might show where items belong, how many items belong there, what the standard procedure is for doing something, the status of work in process, and many other types of information critical to the flow of work activities. In the broadest sense, visual control refers to the design of just-in-time information of all types to ensure fast and proper execution of operations and processes (Liker, 2004)

Galsworth (2016) investigation, as a visual workplace initiative gathers speed, management will find itself faced with many micro-decisions that, summed up, have a large impact on the macro environment. It is important to form a special team to attend to them. That is precisely the purpose of the Macro-Visual Team.

Figure (4) show the model of resources dimension to building the Visual Management.



### **The learning organization Dimensions:**

The final model that we need to building Visual Management is learning organization dimension which include Decision Making, Solve Root Problem and Understand the situation the author building the model from academic literature review.

Learning organization is having the learning organization as an essential part of the foundations of a visual organization. since the learning organization works to explore the knowledge and then invested in achieving the objectives of the visual system, as well as working on developing the strategies for employees continuous learning.

Tonkin (1998) claimed “Visually helping people to understand their own jobs, through this training, leads them to ask, ‘Why am I doing this?’ They learn to do their own jobs better. In turn, they begin to ask other questions, such as, ‘What can we do to reduce inventory in the plant, deliver JIT to our customer, and make sure that product comes off the line right every time?’ “They may not have understood before that what they’re doing affects whether the company has to borrow money to meet next month’s payroll,” Montgomery added.

Likers (2004) point out thorough consideration in decision making includes five major elements: finding out what is really going on, including genchi genbutsu. Understanding underlying causes that explain surface appearances asking why? Five times. Broadly considering alternative solutions and developing a detailed rationale for the preferred solution. Building consensus

within the team, including Toyota employees and outside partners. Using very efficient communication vehicles to do one through four, preferably one side of one sheet of paper.

The methodology of systemic for problem solving: lean organization traces the scientific methodology and the formation of working groups (problem-solving teams) to search for the knowledge solutions to deal with business problems. It is the responsibility of the leader to follow up on the problems and find solutions and avoid repetition, then ensure the achieving the continuous improvement indicators. The methodology of systemic for problem solving: lean organization traces the scientific methodology and the formation of working groups (problem-solving teams) to search for the knowledge solutions to deal with business problems. It is the responsibility of the leader to follow up on the problems and find solutions and avoid repetition, then ensure the achieving the continuous improvement indicators.(Kifaya and AL- Ali,2016)

Likers(2004)in his study, he extend the principles of continuously solving root problems drives organization learning: Think and speak based on verified, proven information and data:, Go and confirm the facts for yourself, You are responsible for the information you are reporting to others., Take full advantage of the wisdom and experience of others to send, gather or discuss information.)

Figure (5) show the model of learning organization dimension to building the Visual Management.

### **Conclusion:**

The purpose of this paper is an attempt of developing a framework that building system in a whole while of the organization a cross a cognitive dimensions, and express the system context that contribute to the effectiveness of the system works on the a whole of organization.

The framework include a cognitive approach dimensions as evolution dimensions, behavior dimensions, resources dimensions and learning organization dimensions each dimension is a system include sub dimensions The study also views how the a cognitive dimensions is integrated with each other to achieve the long term objectives of the organization. The framework also features the characteristics and dimensions of a Visual Management that

contribute the effectiveness, efficiency, quality, flexibility, and innovativeness. Furthermore, all these achievements lead to reach the potentially of organization's competitive advantage.

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