The Logical Framework Approach and Worker Commitment

Carmen Jaca, Luis Paipa-Galeano, Elisabeth Viles, Ricardo Mateo and Javier Santos

Abstract The main objective of this paper is to present the logical framework approach (LFA) as a tool that prepares companies and workers to implement continuous improvement programs. This methodology encourages worker participation in different steps in order to reach consensus in the organization. In addition, the application of LFA improves the capabilities of workers in areas such as participatory analysis, problem analysis and objectives analysis. These capabilities are necessary in any continuous improvement program. The paper also presents the results of applying LFA in two different companies.

Keywords Participation · LFA · Improvement · Organizational behaviour

1 Introduction

Many companies believe that continuous improvement programs will enable them to survive in today's climate by improving their performance and results (Prado-Prado 2009). Most current systems are based on the principles of the Toyota

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44 C. Jaca et al.

Production System, where one of the core principles is to facilitate the participation of workers and promote their autonomy [6, 11, 17].

In recent years, many authors have suggested that the key to the different methodologies and tools originated in Japan is that they are based on the participation and commitment of employees through training and behavioural change [4, 22]. However, it was found that the application of improvement tools in the West focuses on operative aspects, leaving aside the aspects that have to do with change management and people [7, 10, 12, 15, 18]. Organizations commonly implement continuous improvement systems from top to bottom, where worker motivation and participation is usually considered to result from those improvement programs. However, it is necessary to have a strategy to support behavioural change in people [14].

In fact, getting employees to be involved in and committed to Western companies is an unresolved matter. According to the prestigious consulting firm Gallup, about 70% of U.S. workers are not committed to their work or are "actively disengaged" from their work, meaning they are emotionally disconnected from their workplaces and are less likely to be productive [9]. As a result, most of the workers' potential is wasted and with it, the opportunity to improve business results. These are the core principles of the continuous improvement methodologies: the autonomy of individuals and their participation in improvement through their own opinions and ideas.

The objective of this paper is to present a tool used in donor organizations as a way to increase the involvement and motivation of employees in continuous improvement processes. Using this tool, which is called the logical framework approach, the organization focuses first on the analysis of environmental comfort and the development of the habits of the participants, and then improves processes and operations.

2 Environmental Comfort as Motivational Factor

Over the past 35 years there has been a profusion of theories linking the workplace with levels of job satisfaction and worker motivation and stress [2, 24]. Several studies have shown that aspects such as spatial organization, architectural details and environmental conditions (order, cleanliness, ambient conditions and resources, spatial organization, architectonic details, and view or visual access from the work area), are associated with motivation, stress, performance and even social interaction at work [3, 8, 16, 23].

As a result, some authors have coined the term environmental comfort, which links the psychological aspects of workers' environmental likes and dislikes with concrete outcome measures, such as improved task performance, and with organizational productivity through workspace support for work-related tasks. Environmental comfort includes three categories: physical, functional and psychological comfort. Together these categories make the work environment stimulate workers so they will perform better as they carry out their tasks [24].

In recent decades, several studies have attempted to explain the factors that affect the success or failure of organizational change. Kristin Piderit [20], for example, proposes a new way of understanding employee response to changes. The author maintains the idea that any change process needs both top-down and bottom-up work. Meanwhile, Hodgson [13] proposes that the development of an organization or a change in its strategy involves, even partially, the development of habits that are agreed upon by employees. The same author also stresses that the psychological mechanism of forming habits is something much more specific than what is commonly denoted as "organizational culture". Thus, he suggests the importance of focusing on processes of habit development as a way to address organizational changes more successfully.

In order to establish a starting point for sustainable continuous improvements, it is necessary to first focus on identifying the needs and interests of individuals with regard to the workplace (environmental comfort) and then focus on improving processes and operations. To facilitate this process, we present a methodology, the logical framework approach, which is useful for promoting logical thinking and checking internal logic. The method also encourages people to consider what their expectations are, while also improving communication between people who are involved in the change [1].

3 The Logical Framework Approach Methodology

The logical framework approach (LFA) is a widespread methodology, particularly in donor-assisted projects in developing countries [1, 5]. This methodology proposes a procedure for the planning of a development project. The different steps used by the LFA promote the participation of the different parties involved, based on the identification of problems in order to reach the proposed solutions. Thus, the methodology encourages participants to identify different visions regarding their particular interests, directives and resources that can be in favour of or against a proposal for a solution. Employees are then able to consider at the same time how the problems are perceived and the expected solution or results. It is therefore ideal to create a shared vision from all stakeholders via consensus building [19].

This methodology has been adapted in order to encourage participation and consensus, as mentioned above. For this purpose, the steps have been tailored to focus on identifying and solving problems and concerns related to environmental comfort. Basically the adapted methodology applies steps adapted from LFA, following the sequence suggested by the methodology, which are the following (see Fig. 1):

- Participatory analysis: Environmental comfort is analysed by the different people involved (workers, staff, supervisors, mid-level managers and directors, among others), according to Vischer's model.
- Problem analysis: This consists of identifying the cause-effect relationships between the major problems found in the participation analysis step, thorough the use of a 'problem tree'. The objective of this phase is to be able to reach the root of the problems.

C. Jaca et al.

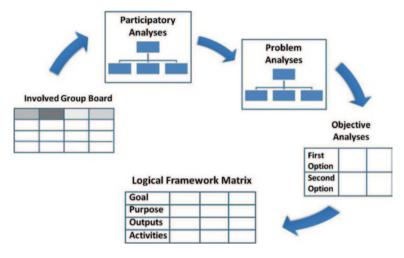


Fig. 1 The logical framework approach methodology. (Adapted from [19])

- Objectives analysis: In the objectives analysis the problem tree is transformed
 into a tree of objectives (future solutions of the problems) and analysed. So, the
 group is able to identify the future desired situations in each of the comfort categories and identify the means-ends relationships that allow the desired situation
 to be reached.
- Alternatives analysis: The purpose is to identify possible alternative options, assess their feasibility and agree upon the future desired solution. This is an exercise in creativity and idea generation.
- Project planning: This consists of preparing and presenting the activities, resources and costs necessary to develop the proposal(s) for solving the problems.
 All the information is condensed into a single Logical Framework Matrix or LFM

4 Application of the Logical Framework Approach in two Different Companies

The LFA was applied as part of an improvement program in two different companies as a first step toward making people aware of order and cleanliness in their workplaces. The characteristics of both companies are shown in Table 1 below.

The application of LFA allowed us to analyse situations of discomfort that were not critical but that could be demotivating factors for employees. Such circumstances can act as a mental barrier for workers, creating a negative attitude towards organizational changes, sometimes even unconsciously. The LFA methodology brought to light these discomfort issues, and thus the employees were heard and valued by their managers. In turn, the workers' attitude relaxed and they displayed a more

Table 1 Characteristics of the companies

Company	Activity	Location	Turnover	Nº employees	Participants
A	Manufacturing	Spain	15M €	120	24
В	Food and agriculture	Colombia	10M €	70	70

Table 2 Example of improvements resulting from the application of LFA in Company A

Area	Improvements proposed by employees
Maintenance	Improvements related to cleaning: Improved coolant leaks, cleaning program establishment and renovation of certain elements Repairs proposed: cranes, damaged glass in machines, heating system in plant
	Review of preventive maintenance guidelines: cranes, breakdowns reports
Machines	Improvements related to order: Painting of floor space, relocation of current materials, establishment of loading and unloading area Ergonomic study
Health and Safety	Management of safety: Safety audits, improve the use of PPE, create incidents collection system, reactivate the committee to study incidents and accidents, be educated about occupational risks Elements of prevention: Install emergency lighting, create per position plan, close engine cowling
Training	Create a competency management system, create a system of incentives for improvement proposals, create interdisciplinary teams for improvement
Communication	Create shift sheet, train people in assertiveness and social skills, implement boards with production planning
Housekeeping	Put spacers in lockers, perform housekeeping study in shifts, distribute lockers

positive attitude toward listening. In both situations, the application of LFA led to improvements related to environmental comfort, as evidenced in Table 2 and 3, which includes some of the proposed improvements from the implementation of the Logical Framework Approach. The methodology not only encouraged employees to analyse the improvement opportunities, but also to propose and participate in the implementation of those improvements.

As the above tables show, the proposed improvements will not only impact matters directly related to the environmental comfort of workers. This methodology has led to proposals and actions related to the productivity and performance in both companies.

48 C. Jaca et al.

Area	Improvements proposed by employees
Logistics	Pre-order programming, programme conveyors at different times, systematic order platform
	Google map for location of farms
Processes	Create and communicate manual for office functions, worker training by function, define organizational chart
	Define processes and participants with systematic template, modify maintenance emergency procedures
Human Resources	Professional Development Plan, worker performance evaluation plan
	Open lines of credit supporting vehicle replacement, promote social activities
	Social area for visitors
Corporate image	Promote the dissemination of corporate image with employees via incentives Establish routine exterior maintenance
Maintenance	Improved parts store, control maintenance plans, maintenance training
Health and Safety	Periodic training in risk prevention

Table 3 Example of improvements resulting from the application of LFA in Company B

5 Conclusions

The application of logical framework approach combined with Vischer's comfort model is designed to promote the participation of people by attending first to their needs and then to the overall improvement of the process. We argue that the employee's attitude is influenced by his perception of his work, and this perception acts as an input for personal participation and motivation. The proposed methodology is based on organizational change management, which is founded on continuous improvement tools, and organizational behaviour principles, which is proposed as a way of addressing improvement in an organization. Once the employees have had the opportunity to analyse and improve the aspects related to their comfort, the program focuses on improving processes and operations.

The following benefits are expected from applying LFA:

- a. Putting the organization on the path of continuous improvement
- b. Increased employee morale by improving environmental comfort in its three dimensions: physical, functional and psychological.
- c. Reduction of absenteeism and staff turnover by improving environmental comfort in all three dimensions.
- d. Increased involvement in the organization by engaging employees in the identification and resolution of problems from building consensus and a shared vision.
- e. An increase in productivity through the development of training programs oriented toward changing people's behaviour.

The application of this methodology in both companies shows that LFA is a useful tool for fostering the commitment of workers by aligning their needs and complaints with those of the company where they work.

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