INTERNATIONAL JOURNAL OF LAW, GOVERNMENT AND COMMUNICATION (IJLGC)

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GLOBAL ACADEMIC EXCELLENCE

TEAMWORK COMMUNICATION STRATEGIES IN ENHANCING TQM IMPLEMENTATION IN MANUFACTURING ORGANIZATIONS IN MALAYSIA

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Abstract:

The term *teamwork* is so popular in organizations and had always been a way to do work in order to increase productivity. In fact, organizations use this word to motivate employees through posters hanging on office walls and to empower employees to a certain extent. However, although teamwork is often easy to observe, but the practice and strategies of communication used in building and maintaining teamwork are always difficult to describe and yet more difficult to produce. In this article, we present teamwork communication strategies in TQM implementation in Malaysia manufacturing organizations. This study was done using qualitative in-depth interview. The study had been carried out in five manufacturing organizations originating from three different continents; two Malaysian local organizations, two eastern and one western organization, and all of them located in Malaysia. In selecting the informants, the study adopts a judgment type of purposive sampling techniques. Results show that the most preferable strategies of communication for teamwork are tell and sell, identify and reply, and underscore and explore. Whereas the formal internal-operational communication, besides informal and personal communication are the preferred practice of communication at a certain level. A reliable medium of communication for teamwork is still face-to-face meetings.

Keywords:

Communication, Teamwork, Manufacturing, Organization, TQM

Introduction

This paper aims to provide an analysis of teamwork communication strategies in enhancing TQM implementation in manufacturing organizations in Malaysia.

Communication is well known as a functional mechanism of coordination according to the organizational strategy literature (DuHadway et al., 2018; Heide et al., 2018). This means that in a functional environment, people interact with each other, where they practice planned or unplanned communication techniques, tactics and strategies. If the communications are planned, there are usually guidelines telling employees on how to act, communicate and the constraints that tell them how they are not supposed to interact. It is important for organizations to have certain means or guidelines for interpersonal and mediated communications to enhance the effectiveness of their work-related communications and strengthen teamwork (Pollack & Matous, 2019; Gharaveis et al., 2019).

Quality Gurus, such as Deming (1986; 2018) and Oakland (2000), stressed that teamwork is one of the critical factors for the success of TQM implementation. Successful organizations are run through teamwork (Snongtaweeporn et al., 2020). Teams that are efficiently and effectively work together would have a much higher morale, productivity and pride in their work results as compared to those employees that work in an individual capacity. The employees that are more involved of quality group activities are inherently more convinced of the benefits that quality programs have towards the quality of their work (Verma et al., 2021). In addition to that, in a survey conducted at 2 of the UK factories of Hewlett-Packard concluded that the respondents' answers from the quality team was more favorable towards the team quality initiative (Akram & Siraji, 2021).

There are two typical type of formal team system. First, the functional or natural teams, which is usually signified with doing the day-to-day business activities or routine activities and will usually involve a problem-solving sub-division which is largely made up of staffs from the same division. The quality circle is one of the models of a voluntary work teams. The second type of team is the organizational linking together functions by forming team system cross-functional (Gonzalez & Melo, 2019). Westonlie et al., (2018) had concluded that organizational limitations in solving the customer satisfaction riddle can be overcome with effectively managed cross-functional team. The design and evaluation of a quality delivery service is also mostly dependent on cross-functional teams.

Literature Review

Since many studies indicate that improvement in communication can mobilize the ambient functioning of an organization and it has become one of the main topic to human resources and organizational studies, a careful design of communication strategies should be crafted for a broader usage in organizational management including for a better team functioning in organizations (Suzuki et al., 2019; Sommerfeldt et al., 2019). In discussing organizational communication, Zerfass & Volk (2020) pointed out that, internal communication strategies are as important as external communication strategies for teams that will then lead to organizational success. According to them, this is because internal communication is able to engage employees' intellectuality and creativity to produce better teams. Pollanen et al. (2017) claimed that an integrated functions of communication especially in teams' process will improve organizational performance. The elements stated are messages to be disseminated, supportive management team, well manage personnel, effective mediums of communication

for team interactions, forums and discussions as well as ongoing evaluation. Here, the internal communication discussed in three forms, such as; formal internal-operational communication, informal internal-operational communication and personal communication.

On the other hand, TQM has been so popular especially among manufacturing organizations so much so that many previous studies mentioned that TQM rank high on the agenda of the companies in the effort to generate more profit, increase quality, increase customers and employees' satisfaction and reduce costs (Sahoo, 2020; Shafiq et al., 2019). Shafiq et al. (2019) also asserts that TQM not only promotes the performance of all departments but also joins and integrates all members of the departments to achieve the objectives of the organization. This function can be translated into the building of teams in organizations. To complement that, Dawabsheh et al. (2019) furthermore mentioned that the proper teamwork planning could be a powerful vehicle for TQM implementation to be successful and to achieve excellence in business performance. Therefore, many organizations in manufacturing and services have devoted considerable attention in building effective teams. However, what it takes to practice an effective teamwork still creates skepticism.

Studies by Mohanty and Mohanty (2018) showed the effectiveness of teamwork, communication and the dynamics of groups across private banks, hotels and retail sector and to ascertain the relative importance of communication in groups in determining teamwork effectiveness in banks, hotels and retail sector. Three standardized questionnaires namely Group Functioning Questionnaire, Communication Satisfaction Questionnaire, and Team Effectiveness Assessment Measure Questionnaire have been used to collect the data in this study. The sample size is two hundred and ninety-seven from private banks, hotels and retail chains in Bhubaneswar city, Odisha. The statistical tools used were descriptive analysis, analysis of variance (ANOVA) and multiple regression to analyze the data and as well as to interpret the data. Based on the outcomes, organizational development and intervention strategies were suggested to enhance teamwork effectiveness.

Additionally, Miller et al. (2018) conducted a systematic review in medical publications of PubMed and Embase to identify articles related to team building. The evaluated outcomes in four domains were trainee evaluations, teamwork attitudes/knowledge, and team functioning and patient impact. The team-building interventions were generally positive while evaluating trainees, but only one study associated team-building with statistically significant improvement which is teamwork attitudes/knowledge.

On the impact of teamwork, Sanyal & Hisam (2018) have carried out a study to analyze the impact of teamwork on employees' performances of Dhofar University. The results reveal that there is a strong and significant connection between the independent and dependent variables of teamwork, climate of trust, leadership and structure, performance evaluation and rewards and the performance of the employees of the university.

Teamwork Model
Among the pioneer to study the characteristics of team and teamwork dimensions were the study by Nieva, Fleishman and Rieck (1985) which was related to army teams and another study by Morgan et al. (1986) about navy teams. They examined the group process dimensions that are directly relevant to performance (Driskell et al., 2017; O'Neill, et al., 2018). They proposed four major categories of team performance functions and describe what the team does

to get work done. These dimensions include; team orientation and communicating information, coordination, cooperation and mutual judgment among team members, and motivational functions such as energizing task efforts and resolving conflicts. Morgan et al. (1986) also addressed the issue of understanding and development of teamwork as a determinant of team effectiveness. They adopted a critical incident technique to query naval instructors on effective and ineffective of behavior in teams. The content analysis of responses reveal seven dimensions of teamwork, such as communication, adaptability, cooperation, team morale, coordination, giving suggestions and accepting criticism. Morgan's work was extended by Connon-Bowers et al. (1995). They identified eight core dimensions of teamwork such as adaptability, interpersonal relations, shared understanding of situation, coordination, performance monitoring and feedback, communication, leadership and decision making. Some of these dimensions also mentioned by Ruis et al. (2018) which are communications, cognition, coordination, collaboration and coherence in team which they found to be critical for enhancing team performance.

Methods

The study was carried out in five manufacturing organizations from three different continents; two Malaysian local organizations, two eastern and one western organization, all of whom are located in Malaysia, two companies are located at Skudai Industrial Area, Johor, one is located at Batu Kawan, Penang, one is at Janda Baik, Pahang and another one is located at Bangi, Selangor. In terms of selecting the organizations to be studied, few factors are taken into consideration such as ISO certification and labeled of TQM obtained by the organizations. The data collection took three months to complete which was from January-March 2020. Next, the selection of informants of the research. This study adopts a judgment type of purposive sampling techniques. Judgment type of sampling involves the choice of subjects who are in the best position to provide information that is required for the research. The number of organizations, informants, interviews and observations are presented in table 1.1 below;

Table 1.1: Number of Organizations, Informants, Interviews and Observations

Actual Data Collection	Number of organizations	Number of Informants	Number of Observations
Local	2	4&3=7	1&1=2
Western	1	3	1
Eastern	2	2&2=4	1&1=2
Total	**5**	**14**	**5**

The data of the study were collected through semi-structured qualitative in-depth interview method to cater the research questions of 'what' and 'how'. Furthermore, the topic of communication in teamwork within TQM manufacturing organizations is relatively new to explain, therefore semi-structured interview method is suitable to be used (Giudici, 2019). The questions for the semi-structured interview was prepared based on the findings of the preliminary study which was adapted from the organizational model developed by Te'eni (2001) and a model of TQM implementation developed by Tiagarajan and Zairi (2001). For the purpose of validation, observational data were used to help strengthen and validate the in-depth interviews findings and as well as experts' content validity. For this purpose, an observation checklist was used to record the communication activities among employees and all the signage related to teamwork and TQM around the organizations. These validation techniques are also used by Mohajan (2018). The hermeneutics analysis procedure was

employed in analyzing the data in order to achieve the research objectives. This approach has been used by many organizational communication researchers such as Applebaum et al. (2019). The strength of qualitative research is that the meanings that lies in an identified group of informants or respondents can be expressed as fully and truthfully as possible (Mohajan, 2018). This is because open ended questions in interviews enable informants to describe their answers from their point of view.

Before each of the interview sessions, a brief introduction was made to explain the purpose of the study and a simple definition of internal communication pattern and practice was given. This was done to ensure the uniform understanding of the subject matter. The teamwork communication practice of their organization for the purpose of TQM implementation were then divided into three forms; formal-internal operational communication, informal-internal operational communication and personal communication. Whereas mediums of communication for teamwork were divided into two categories; face-to-face communication and mediated communication. The interview data were then coded based on qualitative content analysis procedure by Powell and Renner (2003) using excel sheets.

Results

The study reveals that for building effective teamwork both formal-internal operational communication and informal-internal operational communication were the most used forms of communication in TQM organizations. On the other hand, personal communication had been found as an important element in enhancing commitment and involvement in teams. Personal communication also appears twice throughout the analysis for the purpose of building teamwork. In terms of medium of communications used for teamwork, most of their daily internal activities were using face-to-face communications such as through formal meetings and discussions. However, mediated communication such as telephones and emails were highly used among managerial teams.

Below are the descriptions of teamwork communication in all the informants' manufacturing organizations based on continents.

Local Companies
Both local organizations were using structured form of teamwork communication where the team leaders received information or instructions to be disseminated and shared with other members. They believed communication is needed in teamwork to build commitment and manage change successfully. Therefore, communication strategies were carefully picked and practiced by both organizations. For the first organization, they let their employees to bring up ideas on how to enhance teamwork, and for the second organization they encourage employees' involvement in quality management programs from the beginning of the planning stage, so that the teamwork spirit develops by itself and the feeling of ownership bloom. Below are their responds on this issue.

Identify and Reply Strategy
...we encourage "tazkirah" after zofor prayer, one of the things is to build teamwork among them. This was proposed by the employees themselves.

...meetings at the beginning of every session among others are to generate ideas for quality and productivity improvement.

Underscore and Explore Strategy

One of the managers' roles is to plan programs for quality and productivity…we discuss about planning of quality programs and actions to overcome problems. After that, we will work closely to the teams and encourage them to explore more ideas and opinion on how they can reduce waste.

Eastern Companies

Effective communication strategies are linked to improved performance and acceptance of innovation in organization. These two eastern companies were serious about building and managing teams. They provide scheduled training on teamwork for their employees. One of the companies provides language classes so that everybody can speak and understand the same language, for this will build teamwork and loyalty. They also believe that two heads are better than one.

Underscore and Explore Strategy

They are also workshops organized by individual departments to promote teamwork. This was especially done to understand the role of all team members and how they're supposed to function.

QMR and EMR will check the inputs-outputs which are recorded to verify against the master plan…all team members will work together to complete their task.

Identify and Reply Strategy

…we encourage to work in team, discuss and share ideas to improve organizational success. There were at one time, the top management request all transportations cost to be reduced because of the increase of petrol. Suddenly one of the teams came out with an idea to decrease a little bit of the product size without compromise of the quality, so that the boxes can be nicely fit to the truck. This idea has reduced so much of the transportation cost….

Team members discuss frequently about quality of product according to schedule and needs and also other things such as experience and ideas. Their concern will be entertained….

Western Company

In building teamwork, various communication strategies were used for teamwork trainings such as lectures, role-plays and simulations. Whereas communication strategies used to practice teamwork among team members was 'tell and sell', where managers choose messages that are important to their employees and let them explore more. They believe that they are in the position to be responsible of disseminating information about key organizational issues.

Tell and Sell Strategy

The managers reinforce values, major and important information to all teams through several means of communication…it is then the duty of the team leaders to reassure all their members understood.

Underscore and Explore Strategy

…business projections, inputs and feedback from all… are important.

The company always involve employees in quality management programs and encourage employees' involvement. This enhanced teamwork and increase the quality of participation and involvement. The spirit is believed to be the root of the success of TQM implementation…which is teamwork.

Table 1.2: Findings of Strategies of Communication Used for Teamwork

Strategies of Communication	Local	Eastern	Western
Spray and Pray			
Tell and Sell			/
Underscore and explore	/	/	/
Identify and reply	/	/	
Withhold and Uphold			

Conclusion

The discussion below focuses on communication and teamwork in manufacturing organization in the process of implementing TQM. The analysis of communication strategies, namely spray and pray, tell and sell, underscore and explore, identify and reply and withhold and uphold were presented. The findings enlighten the understanding of teamwork communication in TQM implementation.

Past literatures had revealed to us that mediated communication is on the move to replace face-to-face communication especially in teamwork task and monitoring performance, as mentioned by Kramer et al., (2019) and Ewing et al., (2019). However, from the findings and discussions, this study had found out that the usage of online mediated communication is quite limited in all manufacturing companies across continents in the process of TQM implementation. These forms and mediums of communication pattern might delay manufacturing sector's future in Malaysia specifically, and especially towards mass production and smart interactive platform and digital technologies. In other words, the manufacturing organizations should embrace and practice online mediated communication in monitoring their processes, disseminate information, getting feedbacks and in training their employees.

Apart from that, the usage of face-to-face communications across TQM organizations were put into action nicely and they were able to attain their goals. The formal internal-operational communication practices are the most common types or form of communication such as formal meetings, briefings and assemblies. The mediated communications mediums are more popular among the administrative staffs. The overall of observations on the communication artifacts is that most of the organizations have displayed a good idea of disseminating TQM implementation messages which is believed to have enhanced the spirit of teamwork and togetherness among all of the employees.

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