Mapping the Relationships between Quality Management Practices, Human-Oriented Elements and Organizational Performance: A Proposed Framework

Abd Rahim Romle, Razli Che Razak, and Abdul Shukor Shamsudin

Abstract—The discussion of quality entails a variety of views and orientations of the different people, things and the way it defined. Previous investigations do not give much evidence on how precisely quality management practices (QMPs) affect organizational performance and it remains questionable. Furthermore, there is no a clear consensus on the comprehensive model for QMPs and organizations were blurred to adopt the real QMPs model in orders to avoid its unsatisfied outcomes. This paper presents the interrelationships between QMPs, human-oriented elements, and organizational performance. Through this approach, the implementation of QMPs has a direct impact on organizational performance and human-oriented elements as well as mediating effect of human-oriented elements on the links of QMPs and organizational performance. Little known about studies that has tested all these variables in a single model of OMPs and organizational performance. This gap has generated a new call for a research to simultaneously examine the influence of these variables in the service sector using a structural equation modeling.

Index Terms—Quality management practices, human-oriented elements, structural equation modeling, organizational performance.

I. INTRODUCTION

The link of quality management practices (QMPs) and organizational performance is an important issue and difficult to evaluate. Defining the accurate role of QMPs and organizational performance is difficult because it covers many areas [1], and wide subjects [2]. As Thiagarajan, Zaire and Dale [3] mentioned that ignoring QMPs matter is equivalent to lack of success, and the winning strategy in a competitive environment is improvement of QMPs in the organization [4]. Therefore, efforts have to be undertaken to improve the management of quality practices because organizational performance is centrally based on it.

A general consensus in the literature that QMPs affect performance [5]. The bulk of the QMPs and organizational performance literature highlighted the favorable results [6]-[9]. Specifically, literature reported the improvement in term of financial [10], quality of product [11], employee

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involvement [12], image [13], quality consciousness [14], and communication [15].

Furthermore, there is no a clear consensus on the comprehensive model for QMPs [16]-[18], and organizations were blurred to adopt the real QMPs model in order to avoid its unsatisfied outcomes [19]. At the beginning stages in development of QMPs dimension were based on the pioneer quality scholars' perspective (*e.g.* Deming, Juran, Crosby, Feigenbaum, Taguchi and Ishikawa).

According to Sila and Ibrahimpour [20], Saraph, Benson and Schroeder [21] were known as the first contributors in suggesting the dimension of QMPs based on critical success factors (CSFs). The volume of empirical works in the field of QMPs increased after the introduction of these CSFs [20].

On the other hand, a number of organization formulated their QMPs dimension based on the key national quality awards (NQAs) criteria [18], [20]. By applying these NQAs, previous investigations have examined the relationship between QMPs and performance. Unfortunately, there is certainly not a clear consensus on the dimensions of QMPs [22], and in the higher education institutions, what dimensions postulate QMPs has not been comprehensively performed [23]. Thus, the objective of this study was to investigate the relationships between QMPSs and organizational performance by including multiple mediating factors to find the comprehensive model of QMPs in the organization.

II. LITERATURE REVIEW

This study used Malcolm Baldrige National Quality Award (MBNQA) as measured by leadership, strategic planning, customer focus, information analysis, human resource focus and process management in order to determine QMPs as proposed and used by Arumugam, Chang, Ooi and The [24], Prajogo and Sohal [25], and Teh, Ooi and Yong [26]. The human-oriented elements were identified by satisfaction, commitment and loyalty (see [30]-[35]). Finally, organizational performance construct was measured by financial, customer, internal process, and learning and growth (see [23], [34]-[37]).

III. HYPOTHESES STATEMENTS

A. The Relationship between QMPs and Organizational Performance

Deming [38] dictated that the system of production and service in every organization need to constantly improve

quality and turn back to enhance the performance. Significantly, one of the important derivative benefits of QMPs is that the employees throughout the company gets deeply involved in designing an effective system and shares a sense of achievement. This shared activity not only produces effective solutions but also acts as a powerful motivator for enhanced organizational performance [39]. Feng *et al.* [40] pointed out that QMPs have a positive relationship on organizational performance. In brief, QMPs implementation is believed lead to organizational performance [41]. Past literature (*e.g.* [5], [7], [9], [15], [42]-[44]) consistently indicated that there has relationship between QMPs and organizational performance. Thus, this study identified there is a positive relationship between the implementation of QMPs and organizational performance.

H1: There is a positive relationship between QMPs and Organizational Performance

B. The Relationship between QMPs and Human-Oriented Elements (Satisfaction, Commitment, Loyalty)

As ordinarily described in the QMPs area, one of the main focus of QMPs is to meet the employees satisfaction (internal customer) (see [7], [45]-[48]). Significantly, QMPs help companies in a consistent manner, their employee satisfaction [49]. In agreement with QMPs which have reported significant link on satisfaction, this study hypothesizes that:

H2: There is a positive relationship between QMPs and Human-oriented Element (Satisfaction)

Furthermore, Kumar *et al.* [41] observed that adoption of QMPs enhance commitment at all levels of the organization. London [50] found that the levels of commitment and involvement shown by management (both senior and middle management) had an effect on the success of the process. Besides, the success of QMPs initiative is relying on several components like the size of organization, employee readiness, leadership and approach to transform [51], [52]. In short, the following hypothesis is suggested.

H3: There is a positive relationship between QMPs and Human-oriented Element (Commitment)

Moreover, one of the primary prerequisite for a successful QMPs effort is maintaining a loyal employee [53]. Several scholars (*e.g.* [20], [54], [55]) also cite employee loyalty as a necessary prerequisite for effective implementation of any quality initiative. In the other words, QMPs refer specifically to the need for loyalty from all employees. In sum, majority of articles (*e.g.* [45], [54]-[56]) asserted that the QMPs will improve loyalty and this be identified in this research.

H4: There is a positive relationship between QMPs and Human-oriented Element (Loyalty)

C. The Relationship between Human-Oriented Elements (Satisfaction, Commitment, Loyalty) on Organizational Performance

The quality management literature has shown that the human-oriented elements are positively related to organizational performance [57]. In examining satisfaction, many organizations adopt QMPs have experienced an improvement in satisfaction (*see* [10], [46], [58], [59], and performance (*see* [5], [6], [40], [59]). There have two types of customers in an organization; internal and external. The

satisfaction of the internal customer (employees) would always be a prerequisite to the satisfaction of the external customer [60], [61], which in turn to the performance of an organization [8], [15]. Because QMPs aim to produce a surrounding that elicits the most beneficial from internal and external customer, it can be expected that satisfaction will lead to increased organizational performance. It is hypothesized that:

H5: There is a positive relationship between Human-oriented Element (Satisfaction) and Organizational Performance.

Second, examining the commitment. Commitment involves a range of people within the organization such as top management, work unit internal customers and the organization itself. A number of previous studies (*e.g.* [62]-[64]) concluded that commitment is related to valuable outcomes for employees such as increased employee morale, reduced stress and improved productivity. If these situations happen, the performance of an organization will increase [62]-[64]. The hypothesized is thus:

H6: There is a positive relationship between Human-oriented Element (Commitment) and Organizational Performance

Finally, loyalty has detected have a significant effect on organizational performance. Loyalty means as "...an attachment to the organization that may be considered as an emotional response, especially when an employee believed in organizational goals and values and has a strong desire to remain with the organization" [62]. Several scholars (*e.g.* [65]-[68]) strongly believed that loyalty is a key driver of organizational performance, and contributes to economic outcomes in service organizations [69]. Therefore, the following hypothesis is suggested.

H7: There is a positive relationship between Human-oriented Element (Loyalty) and Organizational Performance

D. The Interrelationship among Human-Oriented Elements (Satisfaction, Commitment, Loyalty)

Prior study (*e.g.* [70]) performs that employees can react with dissatisfaction towards commitment when expectations are offended. For instance, when middle manager do not offer timely feedback to employee complaints, suggestions, and demands, or when the time-span between expression of an idea and its implementation takes too long or does not take place at all. Consequently, employees think about their own jobs, find and solve problems related with their job [53]. From an employee's viewpoint, feelings of commitment should have a positive impact and derived from attitudinal responses and satisfaction [71]. In this context, it is hypothesized that:

H8: There is a positive relationship between Human-oriented Element (Satisfaction) and Human-oriented Element (Commitment)

Moorehead and Griffin [72] maintained that the employee satisfaction is enjoyable emotional state resulting from the valuation of their job, whilst employee loyalty was viewed broadly as an employee's feeling of attachment or concept deals with the behaviour of the employees to an organisation [63]. Silvestro [73] emphasizes that the employee satisfaction and loyalty are seen as critical to the capability of service organisations to react effectively to customer requirements. Several studies (*e.g.* [74]-[76]) point that employee satisfaction is significantly related to employee loyalty to their organization. These empirical results also proposed that the organisation must satisfy employees to make them loyal. Thus, this study hypothesized that:

H9: There is a positive relationship between Human-oriented Element (Satisfaction) and Human-oriented Element (Loyalty)

Employee commitment to the organization is a very important driver of employee loyalty in the service industries [77]. Commitment could be described as a motivation to stay with a partner [78]. On the other way, commitment as a psychological thought of the mind through which an attitude, concerning with the relationship with a business partner [79]. In this regards, Dick and Basu [79] stressed that commitment and loyalty are interchangeable terms. In contrast, other scholar (*e.g.* [81]) see that there are distinctions between commitment and loyalty, and thus the constructs are not the same. In the same vein, Evanschitzky *et al.* [82] also maintain that commitment is not similar with loyalty, where commitment refers to the economic, emotional, and/or psychological attachment that the employee may have toward the organization. Hence, this study hypothesized that:

H10: There is a positive relationship between Human-oriented Element (Commitment) and Human-oriented Element (Loyalty)

E. The Mediating Effects of Human-Oriented Elements (Satisfaction, Commitment, Loyalty)

The main objective of TQM is to achieve customer satisfaction whether the customer is internal (*e.g.* employee) or external (*e.g.* final product recipient). The first step in achieving employee satisfaction is to define the employee's needs and wants and then translate these needs and wants into standards. Furthermore, previous studies (*e.g.* [83]-[87]) established that QMPs have a positive relationship on organizational performance. Prior studies also found that satisfaction have a positive significant effect with QMPs (*e.g.* [54], [88], [89]), organizational performance (*e.g.* [30][34][90]), loyalty (*e.g.* [74]-[76]), and commitment (*e.g.* [53][71]). By followed the main principles as suggested by Baron and Kenny [91], the following hypotheses are described:

H11: Human-oriented Element (Satisfaction) will fully mediate the relationship between QMPs and Organizational Performance

H12: Human-oriented Element (Satisfaction) will fully mediate the relationship between QMPs and Human-oriented Element (Loyalty)

H13: Human-oriented Element (Satisfaction) will fully mediate the relationship between QMPs and Human-oriented Element (Commitment)

Moreover, in QMPs literature, employee commitment are identified as an important element of a successful QMPs initiative. Previous scholars found that commitment have a positive significant with QMPs (*e.g.* [30], [34]), organizational performance [30], [57], [62], and loyalty [80], [81]. Thus, this study hypothesized that:

H14: Human-oriented Element (Commitment) will fully mediate the relationship between QMPs and Organizational Performance

H15: Human-oriented Element (Commitment) will fully mediate the relationship between Human-oriented Element (Satisfaction) and Human-oriented Element (Loyalty)

H16: Human-oriented Element (Commitment) will fully mediate the relationship between Human-oriented Element (Satisfaction) and Organizational Performance.

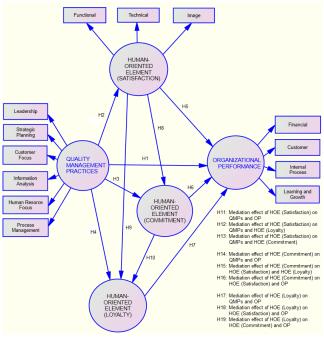


Fig. 1. Hypothesized structural equation model.

In other hand, Allen and Grisaffe [92] explained that loyalty is "...a psychological state and it characterizes the relationship of an employee with the organization for which they work and that has implications for their decision to remain with the organization". Consequently, Mathieu and Zajac [62] also described loyalty as "...an attachment to the organization that may be considered an emotional response, especially when an employee believes strongly in organizational goals and values and has a strong desire to maintain membership of the organization". Past researchers found that loyalty have a positive relationship with QMPs (*e.g.* [20], [33]), organizational performance (e.g. [29], [65]). Therefore, this study hypothesised that:

H17: Human-oriented Element (Loyalty) will fully mediate the relationship between QMPs and Organizational Performance

H18: Human-oriented Element (Loyalty) will fully mediate the relationship between Human-oriented Element (Satisfaction) and Organizational Performance

H19: Human-oriented Element (Loyalty) will fully mediate the relationship between Human-oriented Element (Commitment) and Organizational Performance

IV. CONCLUSION

Fig. 1 performs theoretical model on the relationship of QMPs, human-oriented elements (*i.e.* satisfaction,

commitment, loyalty), and organizational performance. This model describes clearly the relationship between the developed constructs. The proposed model in this study will give a comprehensive understanding on the direct and indirect effects on the relationship between QMPs, human-oriented elements, and organizational performance. The developed model can be tested empirically to support the hypothesized relationships in the future investigation.

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