

# Determination of Competitive Priorities at Egyptian Garment Manufacturing

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## ABSTRACT

Competitive priorities support many establishments to face challenges and share markets. Depending on several references, competitive priorities divided into five dimensions (Quality, Cost, Delivery, Flexibility, and innovation). In this article determination of competitive priorities at Egyptian garment manufacturing was investigated. The research, based on a designed questionnaire which offered to a sample of 50 respondents. Likert-scale was used to assess the respondents' answers and the findings were analyzed by using Microsoft Excel. The samples encompassed 60.46% of export garment enterprises and 39.54% of domestic garment enterprises. The results clarified that quality was the highest priority while the cost was minimal. At the same time, the results showed that domestic garment enterprises (Group B) require more awareness in the implementation of competitive dimensions. Furthermore, the results revealed that, although some policies had a high level of execution, the lowest consistency was achieved (based on the variance coefficient) indicating a potential decline over time. The nature of markets influence on competitive priorities and its implementation at Egyptian garment enterprises. Adopting sophisticated cost policies is urgent for maintaining market share. Some policies need more improvements thru practicing, empowerment, and accountability to ensure the sustainability of competitiveness.

**Keywords:** *Competitive priorities, Competitive dimension, Market share, Egyptian garment.*

**JEL Classification:** L11; L22.

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### **Highlights of this paper**

- The research, based on a designed questionnaire, which offered to a sample of 50 respondents. Likert-scale was used to assess the respondents' answers and the findings were analyzed by using Microsoft Excel.
- The results indicate that the nature of markets influence on competitive priorities and its implementation at Egyptian garment enterprises.

## **1. BACKGROUND**

Commonly, many articles were addressed competitive priorities as strategic preferences, which enhance enterprises to develop and maintain its production systems in order to meet demands of the target markets in which they wish to compete (Krajewski and Ritzman, 1999). Moreover, competitive priorities were identified as a set of goals that support firms to achieve competitive advantage (Leong *et al.*, 1990).

In spite of a theoretical diversification of competitive priorities at several exist researches; the four following basic criteria have a broad agreement a) cost, b) quality, c) flexibility, d) delivery (Hayes and Wheelwright, 1984; Ward *et al.*, 1995). An innovation is a fifth priority which was suggested and gradually recognized.

### *1.1. Flexibility*

According to Mandelbaum (1978) the flexibility was defined as the potential of firms to respond effectively to market changes. The responsibility or reacting was focused by both references (Boyer and Lewis, 2002) and Upton (1994) as they relied on the efficiency and effectiveness criteria for measuring organization's performance on coping with changes. Corrêa (1992) designated that flexibility amplitude contains three main elements. The first is "ability" which provide a potential characteristic. The second is "respond" reflect organizational adaptability due to market changes. Finally, "effectiveness" involves flexibility conception with system performance.

Many others literatures classified flexibility in various dimensions, such as Upton (1994) categorized flexibility into two branches: action flexibility referred to the capability for quickly responding to meet new desires, and state flexibility to the effectiveness of continuing proceeding in spite of the changes. On the other hand (Narain *et al.*, 2000) grouped flexibility into three types: a) necessary flexibility (material handling, labour & machine flexibility), b) sufficient flexibility (chain process flexibility, materials flexibility) and c) competitive flexibility like (production flexibility and market flexibility). It can be concluded that flexibility is a multidimensional concept which would be dealt appropriately with different types of market conditions.

### *1.2. Quality*

Quality dimension regarded as a striker tool to entrance customers' satisfaction, solving problems and reducing prices in order to attain a large market share and implement a high investment (Kotler, 2003). Several articles identified quality in multi-dimensions such as (conformance, performance, consistency, serviceability, durability) (Garvin, 1987). Customer's perspective is central to any definition of quality, where the customers whose only decide what products or services achieve or meet his/her requirements (Juran, 1974). Thus, quality is commonly viewed as an essential source of competitive advantage. Furthermore, many scholars considered quality as a competitive strategy. For example, References Prajogo (2007) and Porter (1980) demonstrated that quality has evolved from an operational to a strategic level and establishments could enhance their competitiveness and remaining customers' loyalty through adopting quality as a strategic goal to meet customers' expectations.

1.3. Cost

Generally, many organizations attend to own a competitive advantage by adopting suitable policies on cost reduction, which allow to control on those markets where the customers are sensitive to price and acquiring more privileges than rivals (Baranes and Bardy, 2004).

Porter (1980) argued that one or more following strategy can lead to lower cost: 1) cost leadership: requires Exploitation of resources, labor commitment, and frequent detailed reports. The feature of this strategy leads to lower cost, standardized products, and economies of scope and scale. 2) Differentiation: this strategic emphasis on marketing research, flexibility, and singularity. 3) Focus: aimed to narrow strategy such as (production line, supplier and client groups or marketplace) through cost reduction, differentiation or both.

1.4. Delivery

Several reviewers termed delivery as a tool which interested in satisfying customers through providing the needs in a timely manner with the right quantity. In this context (Li, 2000) stated that delivery issue could be assigned to the following concepts: firms' responding (how quickly products or services meet customer requirements), firms' reliability (reliability of products or services provided to the market), firms' improvement (the rate of products or service improvement).

1.5. Innovation

Innovation is another priority key which has been considered by several articles. References (Kroes and Ghosh, 2008; Drohomertski et al., 2014) defined innovation as designing and introducing new products and processes. In the same vein, reference (Pai and Chang, 2013) pointed to innovation as a firm's capability to produce products or services which add new value. In addition (Noble, 1997) divided innovation into two definitions: A) Incremental innovation related to a small change or improvement to existing products or services. B) Radical innovation includes creating and developing new products, services or processes.

2. METHOD

The research depended on a designed questionnaire to collect data. Personal interviews with labors, supervisors, and heads officers occurred. The questionnaire in this article was offered ( in the Arabic language) to a sample of 50 manufactories and the total respondents reached (86%) overall. Likert-scale as presented in the Table 1 was used to evaluate the respondents' answers and the findings were analyzed by using the Microsoft Excel program. The samples encompassed 60.46% of export garment manufacturers (Group A) and 39.54% of domestic garment manufacturers (Group B).

Table-1. Likert Scale.

| Clause Measuring | Weight (grade) |
|------------------|----------------|
| Strong Agree     | 5              |
| Agree            | 4              |
| Neutral          | 3              |
| Disagree         | 2              |
| Strong Disagree  | 1              |

Source: Vagias (2006).

Due to verify the reliability of the questionnaire two steps were assigned. First step: The questionnaire was introduced to a group of experts and specialists to determine the suitability of its purpose. Second step: The cronbach's Alfa coefficient was calculated according to the following formula:

$$\alpha = \frac{k}{k-1} \left( 1 - \frac{\sum s_i^2}{s_T^2} \right) \tag{1}$$

Where:

$\alpha$  Alfa coefficient (Cronbach's Alfa)

K Number of questions

$\sum s_i^2$  Variance of scores on each question

$s_T^2$  Total variance of overall scores

Table 2 demonstrates the result of alpha coefficients. The result revealed that the questionnaire largely represents the competitive dimensions where exceeds 70%.

Table-2. Alfa coefficient reliability.

| Serial | The competitive dimensions | $\sum s_i^2$ | $s_T^2$ | $\alpha$<br>(Cronbach's Alfa) | Reliability percentage% |
|--------|----------------------------|--------------|---------|-------------------------------|-------------------------|
| 1      | Cost                       | 2.53         | 7.18    | 0.80                          | 80%                     |
| 2      | Quality                    | 3.41         | 8.44    | 0.74                          | 74%                     |
| 3      | Flexibility                | 2.42         | 8.69    | 0.90                          | 90%                     |
| 4      | Delivery                   | 2.22         | 7.89    | 0.89                          | 89%                     |
| 5      | Innovation                 | 4.03         | 9.85    | 0.73                          | 73%                     |

### 3. RESULT

#### 3.1. Cost

The results in Table 3 refer to the respondents' answers toward the cost dimension. The results clarified decreasing at a total percentage (36.44%). At the same time, the results demonstrated that adjusting production processes to decrease costs is the most interesting item in each group A & B. On beside that although performing a periodical revision achieved the high execution, the lowest coherency was obtained. Moreover, the results pointed out that decreasing situations of production failure are the lowest implementation and generally group A is more accomplishment of cost reduction strategies than group B.

Table-3. Respondents' Implementation of Cost Dimension.

| S  | Cost   | Mean<br>(Group A) | Mean<br>(Group B) | $\Sigma X$ | SD   | CV%   | Percentage% |
|----|--|-------------------|-------------------|------------|------|-------|-------------|
| X1 | One of the main priorities of cost reduction in the enterprise policy is MRP system. | 2.12              | 1.39              | 1.76       | 0.47 | 26.7  | 35.20%      |
| X2 | The enterprise tends to adjust the production processes in order to reduce its cost  | 2.55              | 1.66              | 2.11       | 0.58 | 27.48 | 42.20%      |
| X3 | The enterprise performs a periodical revision towards controlling cost policies      | 2.46              | 1.61              | 2.04       | 0.72 | 35.29 | 40.80%      |
| X4 | The enterprise aims to adopt productivity measures to reduce production costs.       | 2.17              | 1.42              | 1.8        | 0.56 | 31.11 | 36%         |
| X5 | The enterprise tries to decrease situations of production failure                    | 1.69              | 1.1               | 1.4        | 0.46 | 33.85 | 28%         |

Percentage% =  $1.76 \div 5 \times 100$ .

3.2. Quality

The findings in a Table 4 signify to the magnitude of quality at Egyptian garment firms, as the total percentage of respondents' answers attained (75.68%). The findings indicated that Egyptian enterprises are more concentrating to use advanced standards in quality control while spreading a quality sense between employees need to be developed. Furthermore, the findings referred that resolving problems due to the quality system obtained the highest coefficient of variation. At the same vein, that the findings demonstrated that group A is more conducting to quality policies than group B.

Table-4. Respondents' Implementation of Quality Dimension.

| S       | Quality   | Mean<br>(Group A) | Mean<br>(Group B) | ΣX   | SD   | CV%   | Percentage% |
|---------|---|-------------------|-------------------|------|------|-------|-------------|
| X6      | The enterprise uses advanced standards in quality control.                                    | 4.81              | 3.14              | 3.98 | 1.03 | 25.87 | 79.60%      |
| X7      | The enterprise pursues to develop its quality systems through training course and practicing. | 4.71              | 3.08              | 3.9  | 1.07 | 27.43 | 78%         |
| X8      | The enterprise uses different tools in quality control to detect the damages and recover it.  | 4.522             | 2.95              | 3.74 | 1.04 | 27.8  | 74.80%      |
| X9      | The enterprise aims to spread quality sense between employees in different departments        | 4.37              | 2.86              | 3.62 | 1.22 | 33.7  | 72.40%      |
| X10     | Resolving problems of production lines are due to the quality system.                         | 4.44              | 2.91              | 3.68 | 1.37 | 37.22 | 73.60%      |
| Average |   | 4.57              | 2.98              | 3.78 | 1.14 | 30.4  | 75.68%      |

Table-5. Respondents' Implementation of Flexibility Dimension.

| S       | Flexibility  | Mean<br>(Group A) | Mean<br>(Group B) | ΣX   | SD   | CV%   | Percentage% |
|---------|--|-------------------|-------------------|------|------|-------|-------------|
| X11     | The enterprise response to market changes due to their customers' needs as soon as it can.         | 3.44              | 1.47              | 2.46 | 0.84 | 34.14 | 49.20%      |
| X12     | The production lines have an ability to turn from product to another                               | 2.97              | 1.94              | 2.46 | 0.83 | 33.73 | 49.20%      |
| X13     | According to changes in ordering, the enterprise has an ability to change its production quantity. | 3.76              | 3.07              | 3.42 | 1.31 | 38.3  | 68.40%      |
| X14     | There is the possibility to change in machines work to conform to product specification.           | 3.11              | 2.04              | 2.58 | 0.75 | 29.06 | 51.60%      |
| X15     | The enterprise can proceed different types of product in an easy manner                            | 4.18              | 2.73              | 3.46 | 1.12 | 32.36 | 69.20%      |
| Average |  | 3.49              | 2.25              | 2.87 | 0.97 | 33.51 | 57.52%      |

3.3. Flexibility

Table 5 presents the flexibility dimension for respondents' enterprises. The results assigned that the total average exceed (57%) and the most powerful implementation related to the capability of the enterprise to process different types of products in an easy manner, whilst the lowest attitude ascribed to the quick response and abilities of the production line to turn from product to another. In addition, the highest coefficient of variation attributed to the policy of changing the production quantity while the lowest belongs to changing in machines work. Moreover, the results showed that group A is more flexible for market changes than group B and the top policies of flexibility at group A reverted to process different types of products while at group B returned to the ability to change production quantity.

3.4. Delivery

Table 6 demonstrates the total average of delivery dimension in Egyptian garment enterprises. The results signified that rate of delivery performance as exceed (62%). The respondents' results revealed that attempting to reduce waiting time for customers is the most important topic while innovating a new delivery method is the worst. In the same context, the results pointed that performing especial strategies in delivering products to customers obtained the highest coefficient of variation.

In addition, a contradictory situation was observed as despite group A is more realizing to delivery dimension, group B achieves a higher attitude to innovate a new delivery method than group A. Furthermore, the result showed that group A is more interested in providing products to customers in a timely manner while group B attentive more to reduce waiting time.

Table-6. Respondents' Implementation of Delivery Dimension.

| S       | Delivery  | Mean (Group A) | Mean (Group B) | ΣX   | SD   | CV%   | Percentage% |
|---------|---|----------------|----------------|------|------|-------|-------------|
| X16     | Providing products to customers just in time is ones of a main target for the enterprise.   | 4.11           | 1.76           | 2.94 | 0.91 | 30.95 | 58.80%      |
| X17     | An especial strategy in delivering products is performed to maintain customers' loyalty.    | 3.72           | 2.43           | 2.84 | 1.1  | 38.73 | 56.80%      |
| X18     | The enterprise attempts to reduce waiting time for its customers                            | 3.93           | 3.22           | 3.58 | 0.94 | 27.37 | 71.60%      |
| X19     | The enterprise tries to increase marketing sharing through innovates a new delivery method. | 2.78           | 2.89           | 3.08 | 0.9  | 29.22 | 61.60%      |
| X20     | Total quality management plays areal role in achieving the principles of Delivering         | 3.91           | 2.56           | 3.24 | 0.98 | 30.24 | 64.80%      |
| Average |   | 3.69           | 2.57           | 3.13 | 0.96 | 31.3  | 62.72%      |

3.5. Innovation

The accomplishments of innovation dimension for respondents are presented in Table 7 where the total average realized(65.04%). The results declared that creating new products play a striker role at innovation dimension achievements. Beside that the results designated that even though Egyptian garment enterprises are interested to characterize its products, the highest CV%was obtained. Moreover, the results clarified that although group A is more implementing to innovation policies, group B is more utilizing various innovation methodologies than group A.

Table-7. Respondents' Implementation of Innovation Dimension.

| S       | Innovation  | Mean<br>(Group A) | Mean<br>(Group B) | $\Sigma X$ | SD   | CV%   | Percentage% |
|---------|---|-------------------|-------------------|------------|------|-------|-------------|
| X21     | The enterprise pursues to create new products.  | 4.09              | 3.34              | 3.72       | 1.3  | 34.94 | 74.40%      |
| X22     | The enterprise characterizes its garment by different properties meet customers' expectations | 3.8               | 3.11              | 3.46       | 1.32 | 38.15 | 69.20%      |
| X23     | Customers' recommendations are the main object of innovation.                                 | 3.14              | 2.57              | 2.86       | 0.84 | 29.37 | 57.20%      |
| X24     | The enterprise accumulates distribution & promotion into innovation strategies                | 3.55              | 2.36              | 2.96       | 1.12 | 37.83 | 59.20%      |
| X25     | The enterprise aims to utilize various innovation methodologies.                              | 3.17              | 3.3               | 3.26       | 1.06 | 32.51 | 65.20%      |
| Average |   | 3.55              | 2.93              | 3.25       | 1.12 | 34.56 | 65.04%      |

## 4. DISCUSSION

Based on the respondent's answer, determination of competitive priority for Egyptian garment enterprises can be assigned on following:-

### 4.1. Cost Dimension

Obtained the lowest implementation which reflects a low competitiveness of the Egyptian garment products, especially in those markets which are sensitive to price. Relying on the results it was observed that strategies to adopt cost reduction and offer products at competitive prices need to be improved and developed, where the periodic review of costs, must be evolved to accommodate market changes, and the failure of production must be reduced to control pricing and then gain a larger market share.

### 4.2. Quality Dimension

Quality is the most powerful dimension at Egyptian garment enterprises, however, the quality perception among labors and supervisors ought to be enhanced in order to maintain product quality which affects customer satisfaction. Moreover, the methodology of quality systems within Egyptian firms require updating to detect production line problems and resolve it as fast as it can which contribute to remaining market share.

### 4.3. Flexibility Dimension

Aiming to the respondent's, flexibility policies desire more attention as although the capability of the organizations to address different types of products the effective performance to deal with market changes is less which designates to potentially of decreasing in customers' loyalty over time. This can be explained by the fact that constantly surveys of markets are insufficient and should be amplified to meet diverse rapid needs.

### 4.4. Delivery Dimension

Related to responding establishments, Delivery achieves a high priority, however, it obtained low coherency which alarming to the probability of dropping in sharing markets of time. Moreover the nature of activity plays a significant role in delivering implementation where group A (exporting garment) is more restricted to supply products in a timely manner than group B (domestic garment). In addition, group B has an ability to innovate a new delivery method than group A.

#### 4.5. Innovation Dimension

Radical innovation is main topic at Egyptian garment enterprises where creating a new products gained the highest implementation. At the same context, the respondents pointed that products characterizing shall be enhanced to maintain its own brand within international markets

#### 4.6. Competitive Priorities Ranking

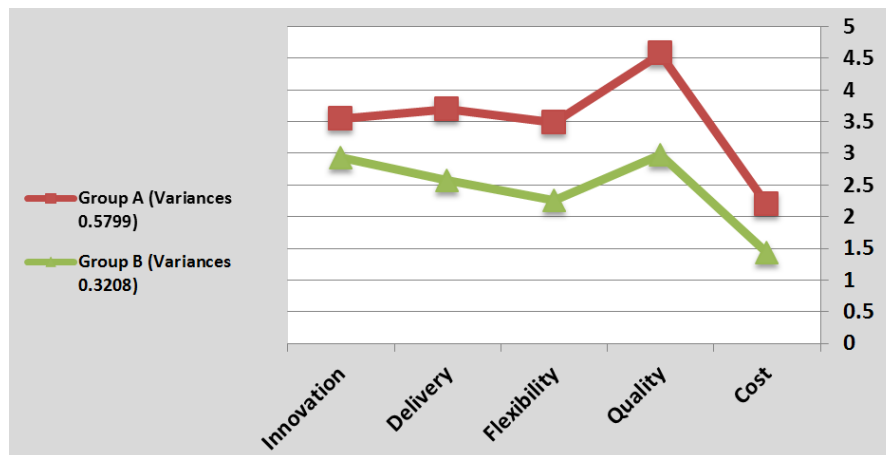


Figure-1. Ranking of the competing priorities at Egyptian garment firms.

Based on the mean of the respondents' answers the ranking of the competing priorities was assigned as illustrated in Figure 1. The consequences indicated that Quality and Innovation perform the main priorities of group B, whilst at group A, Quality is the most powerful priority among others. In addition, the consequences presented that cost is the lowest priority which magnifies the possibility of reducing market share, especially those sensitive to prices. Also, the consequences showed in spite of decreasing on the achievement of competitive dimensions within domestic garment enterprises, the lower variances were realized which refer that development can be applied with ease.

### 5. CONCLUSION

Quality priority is the most interesting priority at Egyptian garment enterprises, while on the other side cost is the lowest. The nature of the market has a significant effect on competitive dimensions performing. Based on a coefficient of variation the contradictory situation was observed as although some policies within each dimension fulfilled the highest execution, the lowest coherency was obtained indicating to a potential of decline over time.

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