

# A Case Study on the Quality Management Activities of a Small and Medium Cosmetic Manufacturing Company

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## Abstract

*The purpose of this study is to provide benchmarking opportunity and implications for the quality management activities of domestic related companies by analyzing the main contents and management performance of the quality management activities which are carried out for management innovation in an OEM / ODM cosmetic small and medium company. The quality management activities of the case company are set as the top management support, process innovation, and customer focus, and the management performance is classified into financial and non-financial performance. As a result of the analysis, the quality management activities for one year showed very high results such as improvement of sales and reduction of claim cost.*

**Keywords:** *Quality Management Activities, Management Performance, Quality Claim, Management Innovation, OEM(Original Equipment Manufacturing), ODM(Original Development Manufacturing)*

## 1. Introduction

In the previous studies, most of them showed a tendency to concentrate 'identify the relationship between quality management activities and performance' and 'Identification of key factors influencing quality management activities'[1,2,3,4,5,6,7].

However, this study analyzed the effect of quality management activities on the performance of Korea OEM/ODM cosmetics company for about 1 year[8,9,10].

## 2. Theoretical background

### 2.1 Quality management activities and business performance

#### 2.1.1 Quality management activities

In this study, we measure achievement by claim improvement results with quality management focusing on support of top management, process innovation, customer-focused activities.<sup>1</sup>

Support of top management is defined as "presentation of value and vision for implementation of quality management activities and ability to lead organizational members through strong will for success". Process innovation is defined as "Change and improving in the processes for claim's reduction". Customer-focused activities is defined as "Effort to achieve customer satisfaction by facilitating communication with customers and understanding customer requirements to minimize customer complaints".

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### 2.1.2 Business performance

Business performance is divided into financial and non-financial performance. Financial performance is defined as "increase in sales and profitability of the organization", and non-financial performance is defined as "performance that emphasizes linkage with organizational strategy including quality level and claim rate".

## 2.2 Status and problems of company C

### 2.2.1 Status

Company C is a cosmetic OEM / ODM professional manufacturing company. They have management philosophies such as transparent management, creative management and knowledge management and about 5% of annual sales is invested in R&D.

And they manufactures about 1,000 kinds of cosmetics, the number of employees is 443, with sales amount is 165.2 billion won in 2016.

### 2.2.2 Problems

In 2016, company C's claim rate was 0.4%, 0.1% higher than competitors (0.3%). This claim processing cost has generated a loss cost of about 1 billion won. In addition, the timely response rate to the delivery date was 88%, which was 2%p lower than competitors (90%).

## 3. Promotion and performance of quality management activities

### 3.1 Promotion of quality management activities

Company C selected 10 types of quality innovation activities as Table 1, and pushed ahead by team or TF team over 1 year and 5 months from August 2016 to December 2017.

**Table 1 Quality management activities and duration of activities**

Quality management activities	Division	Contents	Period
Support of Top Management	Declared Quality Management	We have adopted quality innovation activity as management policy. High-level employees read the quality management declaration and pledged that our team work activities will be focused on quality in the declaration ceremony for quality management.	2016.08 ~
	Claims Compensation	In order to improve the quality consciousness and encourage the claim-improvement activities of the field workers, we reward to claim-free team through a monthly evaluation.	2017.01 ~
Process Innovation	Quality Early Morning Meeting	Every Wednesday at 8:00 am, team leaders and staff from all departments shared the causes and countermeasures for claims occurred during the week and the innovation activities of other departments.	2016.12 ~
	Write Claim History in Work Standards	The claim generation history was entered in the work standard to encourage workers to avoid the same problem.	2017.01 ~
	Strengthen C/T(Compatibility Test)	During the study of the new product, we made a complete new product by strengthening the C/T tests such as the discharge volume and the hardness of the product container and contents. In addition, And the C/T reliability and error reduction were induced by changing the auxiliary material test method.	2016.08 ~
	Computerized ERP for Shipment Approval	'Ordering shipment→Releasing goods' process was changed to a 'Ordering shipment→Request shipment approval→Releasing goods' process to increase the detection rate of defective products and to aim zero claims.	2017.11 ~
	Publishing Failure Casebooks	Annual failures case book issued and distributed them to each team leader to prevent the same problem from recurring.	2016.12 ~

	My Love Machine & Line	We gave responsibility for the production line to supervisor of each team to manage the quality inspection and cleanliness of the production products so that various problems are not caused in the production of the products.	2016.08 ~
Customer-Focused Activities	ONE-STOP Claims Service	In case of complaints from our customers about our products or services, The management team immediately managed only one channel and set up a system to report improvement measures within 3 days.	2016.07 ~
	Line Responsibility	To improve customer's reliability through immediate improvement in claims with customer-centered thinking when occurred claim, we introduced the line responsibility system filled in line supervisor's name on the product packaging box label.	2016.07 ~

### 3.2 Business performance of quality management activity

#### 3.2.1 Non-financial performance

As a result of the quality management activities, the number of claims decreased by 30% from 69 cases in 2016 to 48 cases in 2017 as shown in Figure 1. In the same quarterly comparison, the number of claims increased from 13 in 2016 to 4 in 2017. On the other hand, the claim rate has continuously decreased by about 0.03% p every year as shown in Figure 2.

After the declaration of quality management in the third quarter of 2016, it has been confirmed that all business systems have improved mainly in terms of quality improvement and have decreased by 0.10% p in 2017.

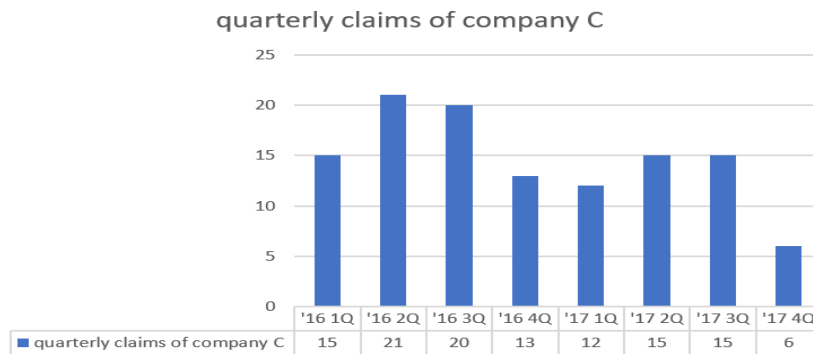


Figure 1. quarterly claims of company C

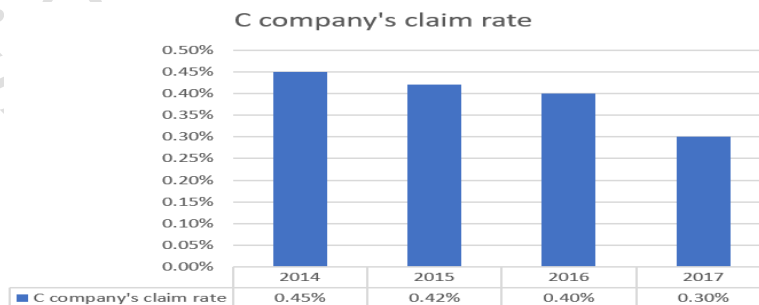


Figure 2. C company's claim rate

#### 3.2.2 Financial performance

As a result of financial performance, sales grew at a CAGR of 61% from 63.8 billion won in 2014 to 165.2 billion won in 2016 as shown in Figure 3. And the operating margin also grew by nearly 100% from 3.9% in 2014 to 7.9% in 2016.

In addition, claim loss cost will be reduced by about 45% from about 1 billion won in 2016 to about 650 million won in 2017 as shown in Figure 4, and the number of employees increased from 243 in 2012 to 443 in 2016, an increase of 16% annually.

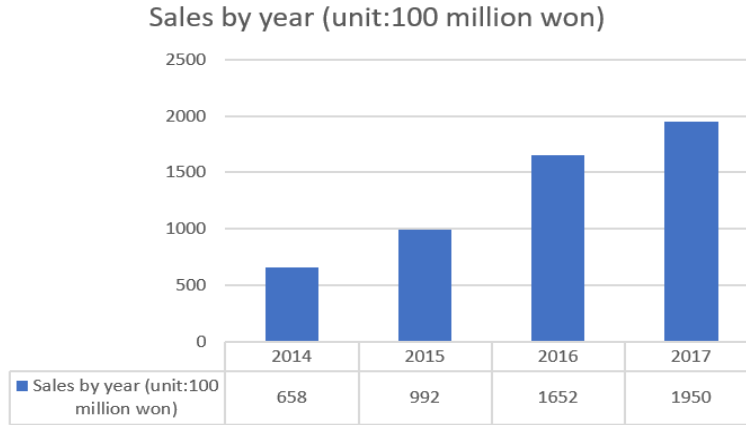


Figure 3. Sales by year

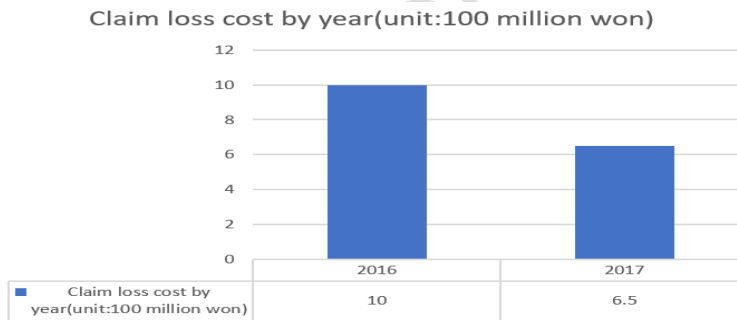


Figure 4. Claim loss cost by year

#### 4. Conclusion

The purpose of this study is to develop cosmetics manufacturing SMEs specialized in OEM / ODM to continuously improve product and service quality in order to gain competitive advantage in the market, (Financial), and to emphasize the necessity of quality management activities in OEM / ODM cosmetic small scale manufacturing companies.

The results of this study are summarized as follows.

First, it can be seen that various quality management activities to secure competitive advantage and improve management performance has a very positive effect on business performance in OEM/ODM cosmetics small companies.

Second, OEM/ODM cosmetics small companies can be linked to the improvement of management performance when the systematic effort to optimize the business process is accompanied by quality management activity at the enterprise level.

As a result, it can be seen that various quality management activities to secure competitive advantage and improve management performance has a very positive effect on business performance in an OEM/ODM cosmetics small company.

This study has some limitations. First, it is difficult to generalize the results of the research because it focuses on one case. Second, financial management performance may be other than quality management activities.

The results of this study, however, will provide practical implications to promote quality management activities to enhance competitiveness and strengthen management innovation capacity in other industries as well as other cosmetics companies.

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