

Impact of ISO 9001 Certification on Firm Performance: Case Study of Beni Saf Cement Company

A.Yahia-Berrouiguet, I. Mankouri, N. Benarbia

Abdelkrim Yahia-Berrouiguet, Ibtissem Mankouri

Faculty of Economics and management sciences, University of
Tlemcen, Algeria

Nadia Benarbia

Faculty of Economics and management sciences, University of Ouargla,
Algeria

Abstract

ISO 9001 certification is new to Algerian industry, but it has been adopted with great speed in recent years. Using a case approach, this study investigates the effect of ISO 9001 certification of Beni Saf company performance, as perceived by the management. Results indicated that the ISO 9001 certification has a positive impact on Beni Saf Company's performance. The marketing advantages were the principal benefits and the benefits related to the human resources occupied the lowest position in the company.

Keywords: ISO 9001 certification, performance, cement, Algeria

Introduction

The quest of quality is probably more widespread and intense globally than at any time in history. Organizations have realized that the key to increased productivity and profitability is improving quality. (Karth, C. P., 2004). It is now generally accepted that ISO 9000 has become the most prevalent global quality initiative (Tsiotras and Gotzamani, 1996). In 1987, ISO published the first of the ISO 9000 standards. These standards were revised in 1994. In 2000, a wide range

of modifications was introduced and last modification was in 2008. ISO 9001 specifies the requirements for quality management system, by which an organization may be certified by a third party. Algerian organizations have gone for ISO 9000 certification in a big way since the beginning of 2000. The number of companies in Algeria which have been certified to ISO 9000 is relatively low, compared with the developed countries.

Despite the number research on ISO 9000 and performance in developed countries, little information exists on ISO 9000 experiences in the developing countries, especially Algeria. There is a great need for research providing information about the effect of ISO 9001 certification on performance in these countries. Using a case approach, this study investigates the effect of ISO 9001 certification on Beni Saf company performance, as perceived by the management.

Following a literature review, this paper has a description of the methodology employed in the study and this is followed by the results.

Literature review

Literature reveals that ISO 9000 certification has resulted in both, positive and negative impacts on companies' performance (in the sense of certification leads or not to better performance). Rayner and Porter (1991) investigation of ISO standards impact on 20 SMEs found that 70 per cent of the companies considered marketing advantages as the principal benefits: customer acquisition, customer retention, entry into new markets. Street and Fernie (1992) collected data from 52 certificated Scottish manufacturers. One-third claimed to have experienced a growth in the customer base, while one-quarter experienced increased sales. Tsiotras and Gotzamani (1996) conducted survey in Greece. The benefits can be separated into "internal" and "external". As internal benefits were identified:

- Modernization of internal organization and process of the company.
- Better documentation.
- Greater employee quality awareness.
- Enhanced internal communication.
- Systematic approach to personnel training.

To the external advantages belong:

- Competitive advantage.
- Improved customer satisfaction and attraction of new customers.

- Increase of the company's reputation.

Vloeberghs and Bellens (1996) collected data from 689 Belgian certified companies. Most of the benefits experienced by these firms were internal, while the greatest benefit is that the formal quality management system leads to greater customer trust. Buttle's (1996) survey of 1220 certified UK companies found that improving operations as well as marketing gains were claimed by most of the firms following ISO 9000 certification. McAdam and Mckeown (1999) reported that in Northern Ireland ISO 9000 certification resulted in benefits for small firms, the specific benefits were:

- better control of the business.
- reduced costs.
- increased sales.
- increased productivity .
- fewer customer complaints.

Tan and Lim-Teck Sia (2001) investigated the benefits of ISO 9000 among 100 Malaysian firms. The study found a number of benefits:

- improved communication.
- improved product quality .
- increased process efficiency .
- improved human resource management.
- reduction in production costs.
- increased market share.
- improved export potential .

Terzioski *et al* (1995) collected data from 1,000 firms in Australia and New Zealand, and found that ISO 9000 certification had no significant positive relationship with business performance. Sun (1999) found that the ISO 9000 certification had little influence on market position and competitiveness, and no impact on employee satisfaction and environment protection. Seddon's (1997) case study research in the UK suggests that if ISO 9000 has any impact on performance, then it is negative.

In this study, we have measured the performance of organizations by 14 different performance outcomes. These indicators are based on the work of (Mann and Kehoe, 1994; Carlsson and Carlsson, 1996; Tsiotras and Gotzamani, 1996; Buttle, 1997; Jones et al., 1997; Bozena *et al.*, 2002; Heras *et al.*, 2002; Santos and Escanscio,

200). A study of these resources has resulted in the following 14 performance indicators for this research:

- modernization of internal organization and process of the company.
- decreasing nonconformities.
- better relations management/employees.
- increased productivity.
- improvement of products/services.
- enhanced internal communication.
- improvement of the company image in the market .
- increasing sales.
- market share increase.
- greater competitive advantage.
- improved customer satisfaction.
- reduction in the complaints.
- improved profitability.
- improved employee training.

Methodology

The objective of this study was to investigate the effect of ISO 9001 certification on Beni Saf Cement Company. Various companies were approached for inclusion as a case study. It was decided to choose Beni Saf Cement Company for several reasons. First, the company is one of the most important firms in Algeria. Second, the company has ISO 9001 certification since 2006. Third, top management of the company were committed to providing support to conduct this research. Beni Saf Cement Company was founded in December 1997, after the reconstruction of the national company of construction materials. It is specialized in production of cement and it employs 607 personnel. The instrument used to collect data was a questionnaire, that lists a total of 14 possible benefits with which the 40 managers of Beni Saf company were asked to rate the extent to which ISO 9001 certification affected such elements, a 5-point likert scale was used (1= very low to 5= very high) . 40 questionnaires were returned (a response rate of 100 %). We used also interviews with general managers, functional managers and quality managers in order to better understand the ISO certification benefits for the company.

Results

Table no.1 shows the mean and standard deviation values of each benefit of ISO 9001 certification.

Table no.1: Benefits of ISO 9001 certification

Benefits of ISO 9001	Mean	Standard deviation
Increasing sales	3.85	0.80
Market share increase	3.75	0.78
Improved profitability	3.62	0.98
Increased productivity	3.57	0.78
Improvement of the company image in the market	3.57	0.93
Improved customer satisfaction	3.40	0.81
Improvement of products/services	3.40	0.87
Reduction in the complaints	3.25	0.84
Modernization of internal organization and process of the company	3.20	0.65
Greater competitive advantage	2.87	0.91
Decreasing nonconformities	2.82	0.87
Improved employee training	2.60	0.87
Enhanced internal communication	2.47	0.90
Better relations management/employees	2.27	0.85

The mean values ranged from 3.85 to 2.27. It appeared that not all benefits of ISO certification have the same degree. Respondents cited the “increasing sales” and “ market share increase “ as the principal benefits, this could be attributed to the increasing demand on cement product in Algeria, especially the government that achieve the development plans, and this require that it suppliers must apply a good quality management system. Respondents cited the “improved employee training“, “enhanced internal communication” and “better relations management/employees” as the lowest benefits, this could be attributed to the fact that the management of the company seek quick gains from ISO 9001 certification, and the human resource development

needs hard and continuous efforts. Therefore, the ISO certification has not a great impact on human resource management in Beni Saf Company.

Conclusions

The growth of ISO 9001 certification and the increasing of mega construction projects in Algeria were the main motivators behind undertaking this research. In this article, a study was carried out to investigate the effect of ISO 9001 certification on Beni Saf Company's performance.

Results indicate that the ISO 9001 certification has a positive impact on Beni Saf Company's performance. This support the idea of Rayner and Porter, 1991; Street and Fernie, 1992; Buttle, 1996; Tsiotras and Gotzamani, 1996; Vloeberghs and Bellens, 1996; Tan and Lim-Teck Sia, 2001, that the ISO 9000 certification is a source of benefits for its holders. The study revealed that the marketing advantages "increasing sales and market share increase" were the principal benefits and the benefits related to the human resources "improved employee training, enhanced internal communication and better relations management/employees" occupied the lowest position in the company. This finding support the works of Rayner and Porter, 1991; Street and Fernie, 1992.

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