

STUDY THE ROLE OF OPERATION EXCELLENCE FOR ORCINUS PROCESS TECHNOLOGIES

Milind D Tayade Research Scholar, Sinhgad Institute of Management & Computer Application,Pune Affiliated to Savitribai Phule Pune University,Pune milind.tayade1111@gmail.com

Prof. Dr. Satish Ubale Professor & Director, Matrix School of Management Studies, Pune Affiliated to Savitribai Phule Pune University,Pune. satishubale@yahoo.com

Dr. Deepali Satish Ubale
Associate Professor,
PES's Modern College of Engineering (MBA Department), Pune
Affiliated to Savitribai Phule Pune University,Pune
deepali.choudaki@moderncoe.edu.in

ABSTRACT

Operational excellence ensures that customer expectations are met by continuously improving the processes through which a business operates. However, it should not be considered as a strategy for pushing change, but a way of preparing and allowing employees to deal with it. The objective of the study is to understand the current state of operational excellence in Orcinus Process Technologies Private Limited and the underlying difficulties and obstacles to design a new model or approach, study the relationships between existing operational excellence techniques and innovation strategies and investigate the importance of several management functional units in the firm such as human resources, strategy, marketing, and finance in adopting operational excellence approaches. The phenomena being studied is the result of context-dependent organisational behaviour, it cannot be recreated in computer or laboratory. As a consequence, data gathering and statistical analysis were carried out objectively, with no intentional bias. During study increased evaluations were found for organisational flexibility and also the cultural commitment to excellence. The well-balanced relationship between operational excellence and organisational culture not only fostered, but also greatly facilitated, the continued expansion of organisational flexibility.

Keywords: Operational excellence, Human resources, Organisation culture, Lean, Industrial management.

Introduction

In a progressively unpredictable commercial world where uncertainty appears to be the only constant, businesses have turned to quality as well as operational excellence strategies to evolve and restore competitiveness. Operational excellence initiatives are frequently employed to figure out how to regulate changes in a timely manner, by establishing an end date for the programme. However, operational excellence should not be viewed as a strategy for promoting change, but rather as a means of equipping and enabling employees to cope with it. Organizations can pursue long-term effectiveness only when they look beyond mere cultural fit and try to foster an attitude toward excellence (Anderssom,Mandfredsson,Svensson, 2014). If these prerequisites are satisfied, we believe that operational excellence initiatives would be effective to boost organisational agility's features and enablers, positioning them as natural responses to dynamic business contexts.

In this research, different techniques and uses of operational excellence in the Orcinus process technologies private limited is checked. The company is active since year 2020 and is a quality-oriented company, offering process design, engineering, and manufacturing of the process equipment in the field of distillation, extraction, absorption, evaporation, heat exchangers, reaction system, mixing technologies, centrifuges, solar system and water treatments application. As a customer focused organization, the company strive to fully understand its customer's needs to better anticipate their requirements. The company also offer process solutions with their inhouse application like engineering and technical support services to create a competitive advantage. The company's success is based on continuous one to one interaction with its customers by giving them innovative solutions and products at a competitive price.



Background

The notion sprang organically from the Total Quality Management approach when researchers and scholars saw the necessity for a fresh method to address the high failure rates of Total Quality Management projects. Such an approach has to be less restrictive and enable resources and instructions to adjust and gain more knowledge of the cultural traits and methods of functioning for each firm (Cui, Gao, Dai, Mou, 2020). The effectiveness and growth of excellence principles and programmes expanded in the 1980s as a result of rising anxiety among western businesses about the better efficiency of Japanese enterprises, where the Deming Prize and its core concept had been created decades before. After repeated failures in applying excellent techniques and practises adopted from eastern enterprises without regard for cultural adaptations, a fundamental shift occurred in the United States in 1988, with the establishment of the Malcolm Baldrige National Quality Award and related excellence model.

Literature Review

Technologies do not control or transform organisations; instead, they are utilised by employees in such organisations to accomplish outcomes, and in that way, tools will be heavily influenced by people's existing views, beliefs, as well as operational, practises (Dev, Shankar, & Qaiser ,2020). It is exactly this mind-set and sentiment that enables operational excellence programmes so effectively, but it is also the aspect that offers the most difficult task that companies must accomplish. People's motivation and involvement are required for excellence: great leader, peak management dedication, fully engaged staff, and an excellence-oriented culture.

The Shingo Paradigm is the most renowned and widely acknowledged approach for implementing operational excellence projects. The Shingo Model is a collection of Guiding Rules that complement the company's everyday endeavours and address loopholes in the attempts toward organisational excellence. Furthermore, the Shingo Model focuses on improving the organisation's structure in order to attain certain goals in the future (Edgeman, 2019).

Organizations must evaluate how to establish an operational excellence programme before starting one. One of the reasons that a considerable proportion of quality improvement projects fail is that corporations put in a great deal of work during the approval stage and then simply forget about it afterwards (Bertels, Howard-Grenville, & Pek,2016). So, it is critical to maintain programme effectiveness, and the organisational goal creation procedure should take into account the continual quest for excellence, so that firms may remain exceptional over time.

Research Gap

If a company's objectives do not align with its culture, it will struggle to engage with the external world, and the desire for operational excellence will suffer. After the gap between culture and approach has been bridged or reduced, we can credibly speak about developing an operational excellence attitude that seeks to evolve and suit the environment.

Research Question

- What distinguishes a corporation that aims for operational excellence?
- What role do operational excellence efforts play in driving a firm to excellence?
- What operational excellence traits contribute to a company's long-term capacity to adapt to changing business environments?

Importance of the study

Techniques of operational excellence emphasise the significance of motivating employees by encouraging them to contribute to and influence the operations of an organization, resulting in a more transparent and varied company culture that draws and motivates workers.

Research Objectives

- To examine the present level of Operational Excellence, as well as the underlying issues and challenges of Orcinus Process Technologies Pvt ltd.
- To investigate the correlations between innovation strategies and existing operational excellence techniques to develop a fresh model and technique.
- To examine the significance of several management functional units such as human resources, strategy, marketing, finance etc. in implementing operational excellence methods in the Orcinus Process Technologies Pvt ltd.

Scope and Limitation

The particular approaches for achieving operational excellence will be determined by individual organisations' mission, industry, assets, and depth of understanding in their operating area. Operational excellence will mature



and get progressively conventional through time, with sufficient approval and funding to increase the field of its operations, owing to beneficial results and benefits to the company's operations, financial or operational effectiveness, and industry reputation. Unfortunately, not all contributions to a company are excellent. It is necessary to have an efficient operational strategy in place, as well as synchronisation throughout the input, output, and what the customer expects. Investigating this strategic element of operational excellence looks to be a critical future field of research based on our findings.

Research Methodology

The study design, data gathering techniques, and evaluation processes are all influenced by practical approach. The phenomena under inquiry cannot be recreated on a computer or laboratory because it is the result of context-dependent organisational behaviour. There were no intended biases in the gathering and statistical analysis of the data. There must be a unique conceptual framework created, which will then be discussed in order to offer new points of view and greatly enhance the theory based on the data obtained. It is the goal of the structured case technique to make high-quality case studies.

Research Method & Design

It was decided to use content analysis as the method for gathering and understanding the data included in the records. Inductively, groupings and responses may be generated from text data. The answer to research questions that have a more expansive investigative goal is facilitated by content evaluation. The categorization of qualitative information for the sake of analytical assessment is at the heart of this technique. The evaluation of content utilises a qualitative technique that adheres to objective, logical, and usability standards in its form.

Research Approach

As the kind of record for inquiry to find the answers to the research question, data pertaining to the business were chosen for two purposes. Firstly, the data provide brief and informative evaluations of a company and its services for stakeholders. As a result, their assessments are more authoritative and credible than alternative sources. Data pertaining to the business are created for auditors and include the company's present condition and financial statements to represent strategies and economic success, respectively.

Analysis of Study

Due to uniformity and identical communicative formats for the company as well as product details, company data improve comparison across the Orcinus Process Technologies Pvt Ltd. information about the business is also more introspective. Company data are not doubtful owing to the utilization of keywords or terminology, as opposed to websites, product documents, or booklets that attempt to persuade clients by utilising trendy language (Oakland, 2014). Another benefit of company data is that they are undisturbed by the study method and are discreet.

The decision of an appropriate selection technique and quantity in descriptive research is based on the judgement and will be justified as appropriate for the goal. When using content assessment, there is no set number of observations (Chaffey and Smith, 2017). The company data should be determined based on the amount of information needed to appropriately address the research question, make interpretations from observations and findings, and present data in a novel and well-structured way. It is a widely used strategy in the descriptive study for locating and choosing examples that give detailed information about the topic under inquiry (Leeflang, Verhoef, Dahlström, Freundt, 2014). As a result, this enables researchers to pick examples that will best meet their study objectives. This method can also improve the generalisation of data collecting.

The administration strategic advantage was sought out in the descriptions of both companies and products as illustrated in Table 1. Most of the time, the Orcinus Process Technologies Pvt Ltd industry describes its competitors, contenders, and position in the market. When reviewing a company's data, these elements are of value to stakeholders (Wu and Chen, 2014). As a result, the material has to be thoroughly examined in an attempt to properly identify the advantages of the firm in question.



Leaders	Leaders ensure that the corporation's scorecard balances performance and attitude.		
	Leaders make certain that the consumer's opinion is recognized effectively throughout the business.		
	Leaders routinely communicate all company outcomes with staff, inviting inquiries and debates.		
Managers	All managers put value generation and waste removal at the centre of their leadership and development activities.		
	Managers often communicate with employees the link between real outcomes and the procedures and concepts that produce them.		
	Managers ensure that set metrics are oriented upwards and that they are recognised and adhered to by those who are affected by them so that individuals can identify where they stand in relation to the objectives and learn how to adjust the scale.		
Associates	To comprehend cause-and-effect, all colleagues analyse outcomes methodically and raise queries.		
	Employees utilise outcomes analytics to prioritise and undertake an individual effort to develop areas where change is most required.		
	Employees display a strong dedication to delivering the most value to consumers while using the fewest non value-added resources possible.		
	All employees endeavour to comprehend challenges from the clients' viewpoint and to optimise the continuous supply of worth to consumers.		

Table 1: Administration's strategic advantages

Company's key issues in order to recognize the difficulties and problems it confronts were (i) Marketing of the product on large scale, (ii) Difficulty in customer acquisitions, (iii) supply chain management issues in getting fulfilled the delivery of customer order, (iv) vendor management issues, (v) Customer satisfaction in product quality, (vi) failure in getting re-order of the product from same customer and, (vii) delay in product delivery.

S.no.	Types of problems	Description
1	Transportation	It's difficult and expensive to move goods between the client's location (all of India) and a manufacturer's location (mostly in Pune).
2	Motion	It requires a lot of follow-ups and communication gaps from the vendor, as well as a lot of material movement from the vendor.
3	Waiting	Await and confirm the arrival of raw materials and customer orders. This is a time-consuming process.
4	Defects	Untrained workers, any vendor who happens to be available, regardless of quality or price.

Table 2: Type of problems in the company

In order to identify the bottlenecks in having the key issues at Orcinus Process Technologies Pvt ltd, the severity of each of the problem started understanding in depth. Figure No.1 illustrates the significance of key contributors for the same. Transportation of the goods and motion related to the materials and vendors have ~ 50 % impact in the overall problem category. It is observed as one of the key area.



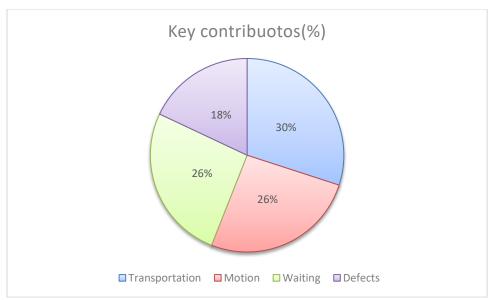


Figure No. 1: Key problem contributors in the company

It demonstrated three qualitative methods for content analysis: guided, evaluative, and traditional. For the area "operational excellence," a cumulative analysis was employed. In other words, keywords were defined throughout the textual analysis in order to determine their situational application (Belekoukias, Garza and Kumar 2014). Guided assessment, on the other hand, was used to examine customer-value activities.

The subject group operational excellence was continuously built by reviewing the types of problems in the company and making recommendations for improving operational and process efficiency. The strategy for all categories was tested prior to undertaking the full textual analysis of all data. To begin, data were analysed to determine their usefulness. The administration's flaws and shortcomings were also corrected.

Findings

A framework for operational excellence was found in the data that was analysed. At least one improvement option was offered for each and every problem that arose inside the Orcinus Process Technologies Pvt ltd. The proposed solutions to the challenges faced by the company are established in Table 3 below.

Problems	Solutions
Transportation	For the convenience of the customer, regional offices are linked together.
Motion	A vendor selection matrix based on geography and quality is designed.
Waiting	Regional offices were linked and monitored closely.
Defects	Based on performance matrix criteria, a benchmark analysis should be conducted
	for all suppliers.

Table 3: Suggested solutions for achieving operational excellence

Few months after the recommendations for the strategies outlined above, the Orcinus Process Technologies Pvt Ltd. was called and asked about the present situation of operational excellence in the company. The accompanying analysis of the findings is shown in Table 4:

Description	Before	After
Completion time of projects in development	12 weeks	9 weeks
Win rate for sales	15%	20%

Table 4: Improved organisational performance on key areas

Using Table 4, the results were summarised and compared to the original evaluation. When we were able to effectively execute the techniques, we found that the results were inspiring and gave management motivation to use similar improvement tools and procedures in other areas as well. Client profit margins increased to 24% since project completion times have been shortened from 12 weeks to 9 weeks. Sales win rates rose from 15% to 20%. They will also be able to make greater use of available resources as a result of this. An increase in total sales of 5 per cent may be attributed to the successful implementation of continuous improvement methods and processes. When this strategy was used, unfavourable feedback decreased, staffs were encouraged to form connections with one another, and a positive customer experience was fostered. As a final step, the tactics and



organisational framework improvements implemented by the firm, have improved the company's ability to meet the project deadline on time.

Conclusion

Many firms have developed operational excellence as a goal to promote progress. Plans, identities, techniques, initiatives, and characters will not result in long-term transformation. True transformation is only achievable when unchanging operational excellence concepts are grasped and firmly established in mind-set. Leaders' priorities must shift to promoting concepts and ethos, while managers' priorities shift to building and coordinating processes to achieve optimum principle-based performance. The only basis on which organisational culture can be created with certainty that it will withstand the test of time is operational excellence standards. Cultures based on values reduce most of the usual variation in a company and, to a considerable degree, become more foreseeable in their capacity to perform on a corporate plan.

Future Scope

All company and management processes must adhere to operational excellence standards. Following the ideas for these procedures will assist to ensure that they are performed as soon as feasible with minimal resources. Each of these commercial and administrative assistance procedures should adhere to operational excellence guidelines consistently. As awareness grows and implementation extends throughout the organisation, a continuous culture that is continuous and self-governed emerges.

Suggestions

To be exceptional, a company must demonstrate a strong, culturally ingrained commitment to excellence as well as innovation. Excellence-driven firms should be able to improve and remain competitive over time by transforming their culture and encouraging organisational flexibility. To achieve so, extra attention must be paid to the indicated factors and enablers.

References

Andersson, R., Manfredsson, P., & Svensson, V. (2014). Preventive maintenance is an enabler for operation excellence in support processes. International Conference Quality and Service Sciences, Prague, 3-5 September 2014,. Lund University Library Press.

https://www.divaportal.org/smash/record.jsf?pid=diva2:915110

Belekoukias, I., Garza-Reyes, J. A., & Kumar, V. (2014). The impact of lean methods and tools on the operatonal performance of manufacturing organisations. International Journal of production research, 52(18), 5346-5366. https://www.tandfon

line.com/doi/abs/10.1080/00207543.2014.903348

Bertels, S., Howard-Grenville, J., & Pek, S. (2016). Cultural molding, shielding, and shoring at Oilco: The role of culture in the integration of routines. Organization Science, 27(3), 573-593. https://pubsonline.informs.org/doi/abs/10.1287/orsc.2016.

1052

Chaffey, D., Smith, P. R. (2017). Digital marketing excellence: planning, optimizing and integrating online marketing. Routledge. https://www.taylorfrancis.

com/books/mono/10.4324/9781315640341/digital-marketing-excellence-dave-chaffey-pr-smith

Cui, L., Gao, M., Dai, J., & Mou, J. (2020). Improving supply chain collaboration through operational excellence approaches: an IoT perspective. Industrial Management & Data Systems. https://www.emerald.com/insight/content/doi/10.1108

/IMDS-01-2020-0016/full/html

Dev, N. K., Shankar, R., & Qaiser, F. H. (2020). Industry 4.0 and circular economy: Operational excellence for sustainable reverse supply chain performance. Resources, Conservation and Recycling, 153, 104583. https://www.sciencedirect.com/science

/article/pii/S0921344919304896

Edgeman, R. (2019). Complex management systems and the Shingo model: Foundations of operational excellence and supporting tools. CRC Press. https://books.

google.com/books?hl=en&lr=&id=QOiIDwAAQBAJ&oi=fnd&pg=PP1&dq=the+Shingo+Model+is+a+collection on+of+Guiding+Rules+that+complement+the+company%27s+everyday+&ots=BUb1Q8uuAY&sig=XkpL6l9X3aiFj9nlfKx2NmNvoM

Leeflang, P. S., Verhoef, P. C., Dahlström, P., & Freundt, T. (2014). Challenges and solutions for marketing in a digital era. European management journal, 32(1), 1-12.

https://www.sciencedirect.com/science/article/pii/S0263237313001576

Oakland, J. S. (2014). Total quality management and operational excellence: text with cases. Routledge. https://www.taylorfrancis.com/books/mono/10.4324/97813158157



25/total-quality-management-operational-excellence-john-oakland

Wu, L Chen, J. L. (2014). Knowledge management driven firm performance: the roles of business process capabilities and organizational learning. Journal of Knowledge Management.

https://www.emerald.com/insight/content/doi/10.1108/

JKM-05-2014-0192/full/html