Influence of Leadership at Top Level Management in Achieving Operational Excellence in Pharmaceuticals

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Abstract: This research has been conducted to study how the leadership at top-level management has an influence in achieving Operational Excellence in Pharmaceuticals. This research intends to explain how the leadership at top-level management can bring Operational Excellence in the Organization. Without the complete support from the top-level management, quality product cannot be delivered to the customers/patients across the world. A research questionnaire on "Leadership at top-level management has an influence achieving Operational Excellence in Pharmaceuticals" for Pharmaceutical companies A, B and C was developed to test the hypotheses on direct interview basis. In Pharmaceutical company A, total 150 people were interviewed on the above topic. Out of 150, 70.00% (105 people) of the people Strongly agreed, 16.67% (25 people) of the people Agreed, 3.33% (5 people) of the people responded Can't Say, 4.67% (7 people) of the people disagreed and 5.33% (8 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals. In Pharmaceutical company B, total 170 people were interviewed on the above topic. Out of 170, 67.65% (115 people) of the people Strongly agreed, 20.58% (35 people) of the people Agreed, 4.12% (7 people) of the people responded Can't Say, 3.53% (6 people) of the people disagreed and 4.12% (7 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals. Similarly, in Pharmaceutical company C, total 195 people were interviewed on the above topic. Out of 195, 69.23% (135 people) of the people Strongly agreed, 19.49% (38 people) of the people Agreed, 4.10% (8 people) of the people responded Can't Say, 2.56% (5 people) of the people disagreed and 4.62% (9 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving **Operational** Excellence Pharmaceuticals. Based on the study it has been concluded that the "Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals".

Index Terms: Leadership, Operational Excellence, Pharmaceuticals, Top-level Management, Organization.

I. INTRODUCTION

According to Kevin Duggan, Operational Excellence has been ambiguously defined as "world-class operations," "the best of the best" or "excellence in everything we do." However, there is a practical, hands on definition of Operational Excellence that, when attained, can allow

Revised Manuscript Received on July 05, 2019

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operations to run without management and enable company leadership to spend its time on planning product development, working as per the requirements of customers, exploring new markets and other activities focused on business growth [1]. Dr Sateesh Kumar Ojha in his article titled "Operational excellence for sustainability of Nepalese industries" states that sustainability of any organization is highly affected by operational excellence. His research aims to discover how industries accomplish operational excellence and how workers of Nepalese industries take operational excellence. As per his research study, Operation is an important phase in entire business when the goods and services are delivered as per the requirements of customer. Industries can reduce the cost, produce more, satisfy, and attract the customer. Industries can reach operational excellence by bringing development in the process of operation. Increase the attributes in the product and service based on the customer's choice by dealing waste of different resources. Several organizations, business groups, authors are continuously involving themselves in the effort of performance excellence [2]. Operational Excellence is attained when high performance teams are looking for continuous improvement in well-designed processes, using suitable technologies and tools. Excellence is supported by an idea in which effective leadership, team-working and problem-solving combine to focus upon needs of the customer and all teams are authorized to act to maintain optimal flows of value [3]. Operational Excellence is perceived as helpful means for accomplishing substantial performance gains. The main elements of operational excellence that are important for industries to succeed are as follows.

1.1. Operational Processes

Operational processes offer competitive advantages through strategically managing business processes in the organization.

1.2. Operational Resources

Operational Resources offers competitive advantages through the possession of a bundle of resources, such as: Human (e.g., workers, engineers, managers), Financial (e.g., securities, cash), Physical (e.g., vehicles, warehouse, plant, equipment, office).

1.3. Operational Competencies

Operational Competencies offers competitive advantages through quality, speed, cost, flexibility [4].

The execution of operational excellence strategy, while showing successful results in attaining organizational

development, has proven to not be sufficient to ensure long term success [5]. On the other hand, Leadership is the

Published By:



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quality that sets great managers apart from good ones. [6]. According to the leadership's scholars, effective leadership is a crucial predictor of organizational success or failure while probing the factors that lead to organizational success [7]. John Gardner in his book, "On Leadership", defines leadership as "the process of persuasion or example by which team or an individual encourages a group to act." Management is doing things right and Leadership is doing the right thing [8]. In Pharmaceuticals, in order to achieve Operational Excellence, a good leadership is required at the top-level management.

II. OBJECTIVE

The objective of this study is to prove how the leadership at top-level management has an influence in achieving Operational Excellence in Pharmaceuticals.

III. SCOPE OF THE STUDY

The study focusses on how the leadership at top-level management has an influence in achieving Operational Excellence in Pharmaceuticals. Top Level Management includes Managing Director, board of Directors and CEO. There are many small and medium Pharmaceutical companies in India which are shutting down or running in low profits. This is due to inefficient leadership at the top-level management.

IV. DISCUSSION

This study focusses on how the leadership at top-level management has an influence in achieving Operational Excellence in Pharmaceuticals. The main role of any Pharmaceutical company is to manufacture and supply quality medicines to all the patients/ customers across the world. It requires many rules, regulations and approvals from the local and central Government to set up a Pharmaceutical company and manufacture the medicinal products. All the medicines should be manufactured under Good Manufacturing Practices (GMP) defined by local Regulatory authorities. It requires lot of investment and time to manufacture a given product as per customer's requirement. All the medicinal products are thoroughly tested for quality before they are supplied to the customers/market. This requires lot of time and patience. Without good leadership and support from the top level-management one cannot achieve Operational Excellence in this field. The middle level management includes General Managers, Vice President and President. In order to produce quality products, it requires skilled man power, good systems, good machinery, excellent infra structure, instruments and many more. Often times, though there is a good understanding among middle level management and lower level management in order to produce quality medicines, without support from top level management, it is very difficult to manufacture or produce quality medicines on time. There are several drugs in the market which are not effective or low in quality. In the majority of cases this is due to inefficient leadership and commitment towards quality at the top-level management. Most of the Pharmaceutical companies in India they compromise on quality within the permissible range in order to deliver the products on time and to gain quick profits. Such companies never reach Operational Excellence. To deliver a drug product on time with desired quality attributes there

should be complete support from top level management. Good leadership is important at this stage. Without good leadership, it is difficult to accomplish Operational Excellence in Pharmaceuticals. Most of critical decisions with respect to the quality of the products are taken by the top-level management.

V. METHOD

A research questionnaire on "Leadership at top-level management has an influence in achieving Operational Excellence in Pharmaceuticals" for Pharmaceutical companies A, B and C was developed to test the hypotheses on direct interview basis. In Pharmaceutical company A, total 150 people were interviewed on the above topic. Out of 150, 70.00% (105 people) of the people Strongly agreed, 16.67% (25 people) of the people Agreed, 3.33% (5 people) of the people responded Can't Say, 4.67% (7 people) of the people disagreed and 5.33% (8 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals. In Pharmaceutical company B, total 170 people were interviewed on the above topic. Out of 170, 67.65% (115 people) of the people Strongly agreed, 20.58% (35 people) of the people Agreed, 4.12% (7 people) of the people responded Can't Say, 3.53% (6 people) of the people disagreed and 4.12% (7 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals. In Pharmaceutical company C, total 195 people were interviewed on the above topic. Out of 195, 69.23% (135 people) of the people Strongly agreed, 19.49% (38 people) of the people Agreed, 4.10% (8 people) of the people responded Can't Say, 2.56% (5 people) of the people disagreed and 4.62% (9 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals. After conducting this research study, it has been concluded that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals" in Pharmaceutical companies A, B and C.

Table-1 Survey for Pharmaceutical Company-A

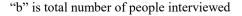
S. No.	Level of agreement	In Number	In Percentage
1.	Strongly agreed	105	70.00%
2.	Agreed	25	16.67%
3.	Can't say	5	3.33%
4.	Disagreed	7	4.67%
5.	Strongly disagreed	8	5.33%
6.	Total	150	100.00%

Level of agreement in Percentage (%) calculation by using following formula;

b

Where, "a" is number of people as per level of agreement





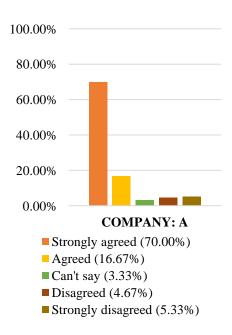


Fig. 1 Graphical presentation of survey of company-A

Table-2 Survey for Pharmaceutical Company-B

S. No.	Level of agreement	In Number	In Percentag e
1.	Strongly agreed	115	67.65%
2.	Agreed	35	20.58%
3.	Can't say	7	4.12%
4.	Disagreed	6	3.53%
5.	Strongly disagreed	7	4.12%
6.	Total	170	100.00%

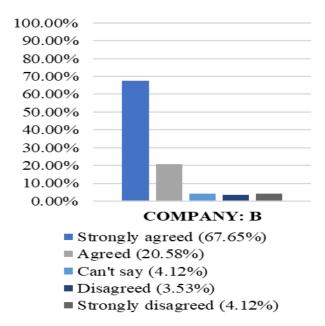


Fig. 2 Graphical presentation of survey of company-B

Table-3 Survey for Pharmaceutical Company-C

S. Level of In In

No.	agreement	Number	Percentage
1.	Strongly agreed	135	69.23%
2.	Agreed	38	19.49%
3.	Can't say	8	4.10%
4.	Disagreed	5	2.56%
5.	Strongly disagreed	9	4.62%
6.	Total	195	100.00%

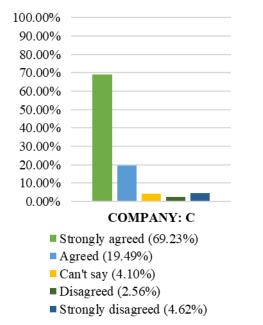


Fig. 3 Graphical presentation of survey of company-C

VI. CONCLUSION

Based on the research study it has been concluded that the Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals". A research questionnaire on "Leadership at top-level management has an influence in achieving Operational Pharmaceuticals" for Pharmaceutical companies A, B and C was developed to test the hypotheses on direct interview basis. In Pharmaceutical company A, total 150 people were interviewed on the above topic. Out of 150, 70.00% (105 people) of the people Strongly agreed, 16.67% (25 people) of the people Agreed, 3.33% (5 people) of the people responded Can't Say, 4.67% (7 people) of the people disagreed and 5.33% (8 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals. In Pharmaceutical company B, total 170 people were interviewed on the above topic. Out of 170, 67.65% (115 people) of the people Strongly agreed, 20.58% (35 people) of the people Agreed, 4.12% (7 people) of the people responded Can't Say, 3.53% (6 people) of the people disagreed and 4.12% (7 people) of the people only Strongly disagreed that Leadership at top-level management has a positive influence in achieving Operational Excellence in Pharmaceuticals. In Pharmaceutical company C, total 195 people were interviewed on the above topic. Out of 195,

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VII. ACKNOWLEDGMENT

I am deeply grateful to my Managing Director (A. Siva Rama Prasad), Directors (A. Vamsi Krishna, K. Madhava Rao and E. Vineeth Rao) of M/s Credo Life Sciences Private **Limited** for their generous support. Firstly, I would like to thank Dr. K. S. Sekhara Rao, Associate Professor & RPAC Chairman, Koneru Lakshmaiah Education Foundation, (K.L. University) Vaddeswaram, Guntur Dist., AP, India for his guidance and support. I would also like to thank My Doctoral committee members of KLU Business School, Koneru Lakshmaiah Education Foundation, (K.L. University) Vaddeswaram, Guntur Dist., AP, India for their kind support. I extend my very special gratitude to my wife, daughter & late son Master Praveen Kumar Reddy Boya, who entered eternity on 12th November 2011. He was the one who gave me an immense inspiration and energy to continue my academics. And finally, last but by no means least, I'm very much thankful, also to my colleagues of M/s Credo Life Sciences Private Limited, Hyderabad, Telangana, India.

VIII. REFERENCES

- Kevin Duggan. Duggan Associates. "Achieving Pharmaceutical Operational Excellence". Available: https://www.rdmag.com/article/ 2013/10/achieving-pharmaceutical-operational-excellence
- Dr. Sateesh Kumar Ojha. "Operational excellence for sustainability of Nepalese industries". Procedia - Social and Behavioral Sciences. 2015, 189: 458–464
- Christine Welch. Business School, University of Portsmouth, Portsmouth, UK. Tammi Sinha, University of Winchester, Winchester, UK and Nigel Ward, A3 Training Ltd, Fareham, UK. "Pursuit of Operational Excellence: A Systemic Approach". Available: https://www.igi-global.com/gateway/article/172781#pnlRecommenda tionForm
- Aryantono Martowidjojo. "Operational excellence as the basis for business transformation: a case study in a car manufacturer". *International Journal of Management and Applied Science*, ISSN: 2394-7926. Oct. 2017, 3(10).
- A.M. Carvalho, P. Sampaio, E. Rebentisch, P. Saraiva. "Operational Excellence as a means to achieve an enduring capacity to change-revision and evolution of a conceptual model. *Manufacturing Engineering society International Conference*, MESIC 2017, 28-30 June 2017, Vigo (Pontevedra), Spain.
- Neelam Azad, PhD, H. Glenn Anderson Jr, PharmD, Amie Brooks, PharmD, Oscar Garza, PhD, MBA, Christine O'Neil, PharmD, Misty M. Stutz, PharmD, Jenelle L. Sobotka, PharmD. "Leadership and Management are one and the same". *American Journal of Pharmaceutical Education* 81(6), 2017, Article 102.
- Mitra Madanchian, Norashikin Hussein, Fauziah Noordin, Hamed Taherdoost. "Leadership effectiveness measurement and its effect on organization outcomes".
- Edward L.Baker, MD, MPH, "Leadership and Management—Guiding Principles, Best Practices, and Core Attributes." The Management moment.
- Amelia Natasya Abdul Wahab, Muriati Mukhtar, Riza Sulaiman. "A Conceptual Model of Lean Manufacturing Dimensions". The 4th International Conference on Electrical Engineering and Informatics (ICEEI). Procedia Technology 11. 2013, 1292–1298.
- R.Sundar, A.N.Balaji, R.M.Satheesh Kumar. "A Review on Lean Manufacturing Implementation Techniques". 12th Global Congress on Manufacturing and Management (GCMM). Procedia Engineering 97, 2014, 1875–1885.
- Mitra Madanchian, Norashikin Hussein, Fauziah Noordin, Hamed Taherdoost. "The impact of ethical leadership on leadership effectiveness among SMEs in Malaysia". 11th International

- Conference Interdisciplinarity in Engineering, INTER-ENG 2017, 5-6 Oct. 2017, Tirgu-Mures, Romania. Procedia Manufacturing 22. 2018, 968–974.
- Felix Sieckmann, Hien Nguyen Ngoc, René Helm, Holger Kohl. "Implementation of lean production systems in small and medium sized pharmaceutical enterprises." 15th Global Conference on Sustainable Manufacturing. Procedia Manufacturing 21. 2018, 814-821.
- Natalie Petrusch, Felix Sieckmann, Jan P. Menn, Holger Kohl. "Integration of Active Pharmaceutical Ingredient production into a pharmaceutical Lean Learning Factory". 9th Conference on Learning Factories 2019. Procedia Manufacturing 31. 245-250.
- Madline Jayan, Khuan Wai Bing, Kamurudin Musa. "Investigating the Relationship of Adaptive Leadership and Leadership Capabilities on Leadership Effectiveness in Sarawak. Schools. 6th International Research Symposium in Service Management, IRSSM-6 2015, 11-15 August 2015, UiTM Sarawak, Kuching, Malaysia. Procedia-Social and Behavioral sciences 224 (2016) 540-545.
- Stanley Jay Rusev, Konstantinos Salonitis. "Operational excellence assessment framework for manufacturing companies". 5th CIRP Global Web Conference Research and Innovation for Future Production. Procedia CIRP 55. 2016, 272-277.
- Jacobo Tijerina Aguilera & Nancy Lucero Tapia Ruíz. "Operational Excellence: Concept Review and Meaning Restructuration". Proceeding of the International Conference on Industrial Engineering and Operations Management Bangkok, Thailand 2019.
- Reham M. Haleem, Maissa Y. Salem, Faten A. Fatahallah, Laila E. Abdelfattah. "Quality in the pharmaceutical industry – A literature review". Saudi Pharmaceutical Journal. 2015, 23, 463–469.
- Ole Boe, Torill Holth. "The relationship between developmental leadership, the results of leadership and personality factors". 4th World Conference on Business, Economics and Management, WCBEM. Procedia Economics and Finance 26. 2015, 849-858.
- Rana Mohammad Shehadeh, Mahmoud Maqableh, Mohammad Orsan Al-Zoubi, Abdel hakim O. Akhorshaideh, Majed Khalil Al-Shami. "Review the Operational Excellence Factors of Service Firms: A Literature Review". European Journal of Business and Management. 2016, 8(3).

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