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QUALITY LEADERS - LEARNING FROM THE DEMING PRIZE WINNERS IN INDIA

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Abstract: *Different governments and professional agencies have set up a number of awards to recognize and reward quality initiatives. Deming Prize is one such award and ever since it was open for companies from outside Japan, maximum number of winning companies are from India, with 20 companies winning the Deming Prize and four among them also winning the Deming Grand Prize. This paper traces the path taken by these companies to know how these companies embarked a journey of Total Quality Management (TQM) and reached their goal of winning the prestigious Deming Prize. The common working principles of these companies and the various tools and techniques used by them are described in a concise manner in this paper. Further, the paper highlights the lessons from these companies to inspire others. The data taken from the respective websites of the companies has been used to list out the objectives, methodologies, and the benefits accrued by the companies.*

Keywords: *Quality, Award, Deming, TQM, Training, Learning*

1. Introduction

Quality of products and services offered by a company decides the fate of the company as the buying decision of the customers depends only on the quality of the output delivered from the company. This has been very well realized and world over the companies are trying to follow or adopt tools and techniques to improve the quality of their outputs. While doing so the companies also focus on improving the visibility of their brand and seeking better recognition. This prompts the companies to go for winning the quality awards, which would ultimately project the company as a leader in quality. The companies also use the quality awards

for an internal application. The awards' criteria enable to judge or benchmark a company's initiative in improving quality as the quality awards' criteria provide a wonderful framework to learn and implement the plans. In this paper, the Deming Prize winners in India are studied to see the similarities and differences across the quality policies so that the prospective winners in particular and other companies in general can sharpen their quality practices. The case study is more of a learning experience than for any critical evaluation. Further, these companies differ among themselves in terms of market capitalization, investment patterns, type of management, and several parameters along the typical management functions like finance, marketing, human resource management, and operations. Hence, it is not the intention here to generalize any methodology or

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policy as a common prescription to any company. Instead, the attempt is to understand and appreciate the efforts put in by these companies in winning the coveted award and to check about the sustainability of such practices. Given the changes that can happen in the corporate world from time to time, particularly when the markets are down, it may be a presumption to expect these companies to adhere to these practices forever. The paper also checks whether the practices that helped the company to win a prestigious award can also help them in sustaining through hard competition and demanding markets. The paper relies on the published information on the company websites, blogs, and printed resources as well. Considering the difficulty in meeting the people for direct or indirect interview, the data from various sources is used to draw the conclusion from this study.

2. Quality awards – an overview

Quality awards have become quite popular in the recent times and have become corporate status symbols. Worldwide, there is an increase in the number of awards as well the categories based on sectors, fields and disciplines. Quality Awards are also known to have acted as catalysts for spreading and promoting TQM across various countries, (Abusa, 2011). Winning a quality award is both a matter of prestige and a testimony to a company's ability to maintain the quality of their products and services. Obviously, organizations are spending more time, efforts, and money in preparing to win the quality awards and hoping to hog the limelight. Though there is a proliferation in the number and category of awards, only a few awards have retained their sheen and have become a stamp of credibility and universal recognition and one such example is the Deming prize. Hence, it may be necessary to benchmark the awards against the best in class. While the debate continues on the real benefits of the awards, the number of companies showing interest in

applying for the awards has increased. This naturally has drawn the attention of different stakeholders towards quality awards. Quite often, the efforts put in and the resources consumed are debated against the benefits and advantages of winning the awards both in the short and long terms. However, the learning from these awards is always helpful and beneficial to the entire organization. In this paper, specifically the Deming Prize winners in India are taken up for a detailed study.

Quality awards won by a company provide an indication of a company's efforts and commitment in striving for quality. Further, such awards help to raise the status of a company in the eyes of the stakeholders and the stock market also responds to the company's product or service in a favorable manner. As offshoot benefits, the company will also be able to attract better quality suppliers, distributors, transporters, and retailers, and finally expand its customer base. This indeed enables the company to stay profitable and maintain its operations amidst the competition among the industries. In the last two decades, it has been raining quality awards in the corporate world of India, in terms of both international and national quality awards won by the companies. This trend has resulted in an increase in the number of companies participating in the quality awards' programs and consequently, more number of awards have been instituted by professional agencies and the Government.

The quality awards instituted across the world continue to rise every year considering the fact that both government and private sectors have set up different awards. The number of award aspirants too has gone up with more and more companies participating in the award process. From inception in 1988 to 2013 award cycle, the Malcolm Baldrige National Quality Award of USA received 1,601 applications from the program's inception and 101 Baldrige Awards have been presented in different categories, with six repeat winners, (Nist.gov, 2014).

Similarly, other countries too have witnessed a surge in the number of applications for the awards. Every year 'Quality Progress' published by American Society for Quality, USA, provides a comprehensive "Annual Quality Award Listing" usually in the month of August. The USA National Awards and the awards set up in the other countries, are both listed along with a brief profile. A complete listing maintained by the American Society for Quality is available at www.asq.org. Most of the quality awards are open to both individuals and organizations, and some are limited to only organizations.

At the international level, some of the well-recognized and most reputed quality awards are:

- Malcolm Baldrige National Quality Award from USA
- Deming prize from Japan
- European Foundation Quality Award from the European Union

Based on similar guidelines several quality awards have been set up in India and prominent among them are:

- Rajiv Gandhi National Quality Award set up by CII (Confederation of Indian Industries) and Exim Bank of India
- Golden Peacock Award set up by the Institute of Directors
- Ramakrishna Bajaj National Quality Award set up by IMC (Indian Merchants Chamber)

2.1 Literature review

Historically, quality awards were set up to encourage those who maintained quality in their products and ensured customers' satisfaction. The awards also used to motivate others to emulate those doing well so that the overall quality goes up. The Deming Prize happens to be the oldest prize instituted in the world exclusively for the promotion of quality through the application of statistical techniques. Details about the Deming Prize are available at

<http://www.juse.or.jp/e/>.

The Deming Prize is one of the highest awards in the field of quality management in the world. It was set up in 1951 in commemoration of the late Dr. William Edwards Deming, a pioneer in the field of quality management from the USA, who contributed greatly to Japanese industries' applications of statistical quality control after the World War II, (www.juse.or.jp/e/deming). Dr. Deming's teachings enabled the Japanese companies to improve their product quality by applying statistical techniques and by proper quality policies. However, it would be wrong to say that the Deming Prize is only an award to recognize the application of statistical techniques in improving the quality, the Deming Prize indicates the ability of an organization to demonstrate the application of TQM concepts effectively in an organization apart from high output quality, (Radhika, 2002).

The Deming Prize takes its pride by the fact any organization has to demonstrate the efforts put in place for the company-wide quality control using statistical techniques. According to an expert, the company should first go for ISO standards along with industry specific standards, embrace the TQM philosophy in letter and spirit and finally should aim for the prize, (Peach 1990). It is further stated that going beyond the prize takes the organizations towards the world class companies. Another observation while winning the quality award is how the overall process of planning and preparing for the award enables a company to do "soul searching" and hence exposes the company's strengths and weaknesses, (Junkins, 1994).

The trend analysis of national quality awards (Chuan and Soon, 2000) in which 17 national quality awards were investigated for structure and process, clearly indicates that the awards create quality awareness in the first place and also keep changing their criteria in the light of the economic and political developments. There are several

strong reasons as to why companies choose to go for quality awards. The main reason is of course to demonstrate the company's ability to reach excellent quality and to imbibe the total quality culture across the entire organization. There are other benefits too, like favorable stock market performance, better returns to the shareholders, a journey of learning, and a systematic documentation and implementation, (Crownover, 2000; Mirza, 2006) and not to forget the place in the champions of quality league. In addition, many organizations have used quality awards as the models for improvement, for benchmarking, for self-assessment, for setting up quality strategies, and for the overall spread of quality culture leading to better results, (Stading and Vokurka, 2003). Researchers (Lee *et al.*, 2003) have also investigated the impact of the quality award on the organizational quality performance. In a similar study, (Cauchick, 2005), more than 30 awards have been examined and confirmed that the quality awards and excellence models are used by companies to improve productivity and quality along with promoting them as significant components in the journey towards excellence. A comparison of Deming Prize and Malcolm Baldrige National Quality Award (Kumar, 2007) indicates how even universities and higher education can also benefit from the awards criteria. In another study (Grigg and Mann 2008), it has been established that the award framework can help the organizations to successfully improve the performance. Other researchers (Madan, 2010; Evans *et al.*, 2012) also have endorsed similar opinion.

In a research study, involving eight Indian companies who have won the Deming Prize and Japan Quality Medal, (Taddese and Osada, 2010), the process techno-innovation and the TQM factors have been examined for contributing to the success. It is reported that three process techno-innovation stage gates, namely process understanding, process improvement and technology

learning, coupled with the soft aspects of TQM resulted in improving the overall performance of the companies as indicated through productivity and quality improvement. It is very important to note that people play a major role in improving the quality of products, and as such, TQM initiatives will not give the desired results if people do not play the proper roles. Hence, human resource managers have to take an active role in recruiting the right type of people to improve quality, and this fact is strongly emphasized in the awards' criteria, (Jagadeesh, 2014).

3. Research methodology of the paper

The methodology adopted in this paper is to collect the related information about the Deming Prize winners from the secondary data source, namely the company's web site and any other published material on the net. For each company winning the Deming Prize, the following attributes were collected from the respective official website:

Year of starting, year of winning the award, main products, sector, standards and certifications obtained by the company, and any other award(s) won by the company.

No financial data is collected as it is not the intention here to compare and analyze using the finance related data. However, wherever required all the data, financial or not, was extracted from the website. In some cases, for additional information, the company's annual reports have been checked and the information is collated. However, the accuracy of the data is as good as the source and no cross verification has been made. Further in the Tables, only the essential information is provided to maintain the brevity of the Table. For additional information, the company's website can be visited and the annual reports can be checked. Further, the information provided in the Table is not claimed to be exhaustive.

4. Deming prize winners in India

Grand Prize) winners in India, and Table 1 illustrates the listing of these companies

At the time of writing this paper, there were 20 Deming Prize (including The Deming

Table 1. Deming Prize winners in India

No.	Name of the company	Year of winning the Deming Prize
1	Sundaram-Clayton Limited (Brakes Division)	1998
2	Sundaram Brake Linings	2001
3	TVS Motor Company Limited	2002
4	Brakes India (Foundry Division)	2003
5	Mahindra & Mahindra Limited (Farm Equipment)	2003
6	Rane Brake Linings Limited	2003, (2013)*
7	Sona Koyo Steering Systems Limited	2003
8	Indo Gulf Fertilizers Limited	2004
9	Lucas TVS	2004, (2012)*
10	SRF limited	2004
11	Krishna Maruti Limited, Seat Division	2005
12	Rane Engine Valves Limited	2005
13	Rane TRW Steering Systems Limited, Steering Gear Division	2005
14	Asahi India Glass Ltd, Auto Glass Division	2007
15	Rane (Madras) Limited	2007, (2012)*
16	Reliance Industries Limited, Hazira Manufacturing Division	2007
17	Tata Steel Limited	2008, (2012)*
18	National Engineering Industries Limited	2010
19	Sanden Vikas (India) Limited	2011
20	RSB Transmissions(I) Ltd, Auto Division (Jamshedpur(Unit 1), Pune & Pant Nagar Plant)	2013

* Deming Grand Prize

The first company to win the Deming Prize in India is Sundaram-Clayton Limited, Brakes Division, in 1998. This company belongs to the famous TVS Group, well known in India for its long history in transportation and manufacturing automotive components and vehicles like scooters, motor bicycles, and three wheeled auto-rickshaws. The news of this company winning the prestigious Deming Prize spread through the corporate world in India and

triggered interest in trying for quality awards at national and international level, (Sridharan, 1998).

4.1. Overview of the companies in india winning the deming prize

The Total Quality Management (TQM) wave that swept the Indian corporate world in the eighties and nineties resulted in many

companies moving towards adopting the principles of quality improvement as enunciated by quality gurus like Edward Deming, Joseph Juran, Philip Crosby, Kaoru Ishikawa, Genichi Taguchi, and Armand Fiegenbaum. These initiatives received a boost with several Indian companies going for collaboration with the Japanese companies, particularly in the automotive sector. Notable among such collaborations are Maruti with Suzuki, Bajaj Auto with Kawasaki, Hero Motors with Honda, Enfield with Yamaha, and TVS Company with Suzuki. In fact, some of the automakers from Japan tied up with companies producing two wheelers, four wheelers, and auto components. This opened the gate for the adoption of TQM principles, already mastered by the Japanese companies. All those practices followed by the Japanese companies that had enabled them to raise the quality bar and become world-class companies, found their way into the Indian auto making companies. Words like “Kaizen”, “Kanban”, “Andon”, and “Hoshin Kanri” to name a few, became the buzzwords in the shop floor. This perhaps explains the reason why there are more number of auto companies among the Deming Prize winners, as depicted in Table 2. Figure 1 shows the skewed distribution towards auto companies.

Table 2. Sectoral distribution of the Deming Prize winners in India

Sector	Companies
Agribusiness	1
Auto ancillaries	14
Automobile	1
Core manufacturing	2
Farm Equipment	1
Plastics and petrochemicals	1
Total	20

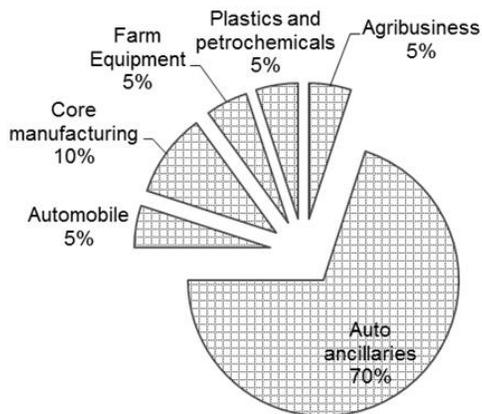


Figure 1. Deming prize winners by sector

The dominance of auto companies among the winners is not surprising because the auto component or vehicles manufacturers have adopted international standards, improved their ability in competing in global markets, entered into strategic alliance with Japanese manufacturers, and above all fully complied with the TQM principles and practices, (Balakrishna *et al.*, 2007) . Several researchers and professional bodies have developed reports to cover the growth and development of Indian auto, and auto-components’ manufacturing companies in India, (Sanyal, 2008; ACMA, 2013; Bhaskar, 2013; Sankaran, 2013). These reports describe the status of the Indian auto companies and illustrate their production and operations along with projections for the future. All these reports indicate how the auto companies picked up the momentum after the globalization and liberalization era that started in the 1990’s. All these initiatives gave rich dividends to this sector, which enabled the auto companies to win the international awards, or best supplier awards, develop ability to capture international contracts, and importantly convince the markets about their rising quality, (Stading and Vokurka, 2003). Interestingly, two South India based auto conglomerates have more number of their units winning the prize. The Rane Group dominates the list of winning companies, by winning the Deming

Prize for four of its plants, and TVS Motor Group has bagged the Deming Prize for five of its companies.

5. Lessons from the winners

Majority of the Deming Prize winners in India happen to be from the automotive sector, either producing automotive components, or vehicles. Table 3 gives an overview of all the Deming Prize winners. All the 14 companies in the automobile sector have also proved to be good suppliers to other companies and some of them have won best supplier award too. Only two companies associated with agriculture in some ways are the distinguished winners. Indogulf Fertilizers is a company producing different types of fertilizers, and Mahindra and Mahindra - Farm Equipment division produces excellent tractors, tillers and other harvesting equipment. These two companies represent the agricultural sector of India. Further, it is more than a decade no other company in this sector has attempted to win the prize. Only one company from the plastic and petrochemical industry belonging to the giant Reliance group of industries in India, has won the prize. Similarly, two companies engaged in the manufacture of steel and ball bearings have won the prize and appear to be one of their kind. Barring two companies, the prize winners happen to be the manufacturers of discrete products, which lend themselves for the application of statistical tools and techniques. The two other industries namely, Indogulf Fertilizers and Reliance Industries Limited have demonstrated that even the process industries or continuous manufacturing industries can successfully adopt the statistical techniques and aim for winning the awards. Perhaps with the passage of time it is quite likely that other types of industries like those in the pharmaceuticals, chemicals, textiles, and paper industries, will also be joining the list of prize winners.

Typically, all the Deming Prize winners have started the Deming journey first by

undergoing training in all the TQM related topics. The intent of the company to go for the award and the efforts and the period involved in the process are explained to the participants. When the Indian companies first launched their programs towards TQM and aiming for the Deming Prize, they were guided by Japanese consultants as shown in some of the cases below: (www.tqmi.com)

- Sundaram Brake Linings Brakes India and Sona Koyo were guided by Prof. Tsuda.
- Mahindra & Mahindra, TVS Motors, Rane Group companies & Lucas TVS were guided by Prof. Y. Washio
- SRF Ltd. was guided by Prof. H. Kume
- Tata Steel was guided by Prof. N. Kano

Prof. Kume, the former Chairman of Deming Application Prize Committee has been providing guidance to companies in India and several Indian consultants, for example Prof. Janak Mehta, are also involved in conducting training programs and helping the companies in the documentation process. The topics covered in the training programs usually in all the Deming Prize winning companies include the following:

- 5S
- Basic QC Tools
- Basics of TQM
- Cross-functional Management
- Daily Management
- Diagnosis and reviews
- Methods and tools for Total Employee Involvement like Suggestion scheme, QC Circles, Kaizen
- New Product Development,
- Policy Management
- QC Story / Problem Solving
- Quality Assurance
- Quality Cost
- Quality Function Deployment
- Understanding of Deming criteria

Table 3. Brief profile of Deming Prize winners in India

No .	Name of the company	Year of winning the award	Sector	Core product(s)	Year of starting operations	Certifications	Other awards won
1	Sundaram-Clayton Ltd. (Brakes Division)	1998	Auto ancillaries	Aluminium pressure die castings for heavy commercial vehicles, passenger cars and two wheelers.	1962	ISO/ TS 16949 FORD Q1, ISO 14001 OHSAS 18001	2002 - Japanese Quality Medal (Brakes Division) by JUSE 2009 - TPM Excellence Award by JiPm 2010 -Gold Certificate of Merit - The Economic Times Manufacturing Excellence Awards 2011- Platinum Certificate of Merit - The Economic Times Manufacturing Excellence Awards
2	Sundarm Brake Linings	2001	Auto ancillaries	Automotive, non-automotive, railways and industrial friction materials	1976	ISO / TS 16949 – 2002 Quality Management Systems & ISO 14001: 2004 Environmental Management Systems	National Award from DSIR, New Delhi, Technology Award from ACMA, India, National Award for Technology Department from DGTD, New Delhi
3	TVS Motor Company Ltd.	2002	Automobiles - Two wheelers	Scooters, motorcycles, and three wheelers	1980	ISO 9000	2012 - Economic Times Most Trusted Brand
6	Rane Brake Linings Ltd.	2003	Auto ancillaries	Commercial Vehicle / Passenger Car / Utility Vehicle & Two Wheeler applications	1964	ISO-9001:2008, ISO/TS-16949:2009, ISO-14001:2004 & OHSAS-	2013 - Deming Grand Prize (formerly IQM)

						18001:2007	
7	Sona Koyo Steering Systems Ltd.	2003	Auto ancillaries	Steering systems for the passenger car and utility vehicle	1985	TS16149 ISO 14001	2007 - TERI Environment Excellence Award 2007 -TERI CSR Commendation for Strong Commitments 2007 - National Training Award by ISTD 2007 - Golden Peacock National Training Award by Institute of Directors 2007 - CII - ITC Sustainability Commendation for Strong Commitment 2007 - TPM Excellence award
4	Brakes India (Foundry Division)	2003	Auto ancillaries and non-Auto ancillaries	Permanent Mould Grey Iron castings	1981	ISO / TS 16949 ISO 14001 OHSAS 18001 QS 9000	2001- Best Foundry of the year 2005 - Green Foundry of the Year” award during 2005. 2005 - National Energy Conservation Award
5	Mahindra & Mahindra Ltd. (Farm Equipment)	2003	Farm Equipment	Farming Implements - Tractors, tillers, transplanters	1963	ISO 14001	2007 - Japan Quality Medal 2010 -TPM Excellence Award from JIPM

8	Indo Gulf Fertilisers Ltd.	2004	Agribusiness	The product portfolio comprises bulk fertilisers, seeds, agrochemicals, specialty and customised fertilisers. Bulk fertilisers include urea, DAP, MOP, SSP, etc.	1988	ISO 14001 and OHSAS 18001	2000 and 2002 -TPM Excellence Award from JIPM. 2001 -IMC Ramakrishna Bajaj National Quality 2003 - Asia Pacific Quality Award
9	Lucas TVS	2004	Auto ancillaries	Automotive Electrical Systems.	1961	TS16949 OHSAS 18001	2011-12 - EXPORT EXCELLENCE AWARD 2012 - Deming Grand Prize
10	SRF limited	2004	Auto ancillaries	Nylon tyre cord fibres	1970	ISO 9001:2008 OHSAS 18001:2007 ISO 14001:2004 SA 8000 TS 16949:2009	2006-07 - Greentech Safety Platinum Award 2007 - Greentech Environment Excellence Platinum Award
11	Rane Engine Valves Limited	2005	Auto ancillaries	valves and valve train components for various engine applications	1959	TS 16949: 2009 ISO 14001: 2004	Awards from OE customers Preferred supplier in the industry
12	Rane TRW Steering Systems Limited, Steering Gear Division	2005	Auto ancillaries	Steering gears, Power steering pumps, Occupant safety systems (seat belts, air bags)	1987	TS 16949 ISO 14001 OHSAS 18001	2011 -Japan Quality Medal (JQM)
13	Krishna Maruti Limited, Seat Division	2005	Auto ancillaries	Seating system	1994	TS16149 ISO 9000	Quality Circle Awards 2004 - Design Excellence Award" from National Institute of Design

14	Rane (Madras) Limited	2007	Auto ancillaries	Steering and Linkage Products, Diecasting Products	1960	ISO / TS 16949 : 2009 ISO 9001 : 2008 OHSAS 18001	Deming Grand Prize (formerly JQM) in 2012
15	Asahi India Glass Limited, Auto Glass Division	2007	Auto ancillaries, Architectural solutions	Automotive glass products: Laminated windshields, tempered back and door glass Architectural glass products: Clear & tinted glass and a range of value added solar control & heat-reflective glass, mirrors, frosted & lacquered glass.	1984	ISO 14001: 2004 QS 9000	2011-12 Zee Good Homes Award for best glass company. Gold for Overall Performance from Maruti Suzuki India Limited Yield Improvement Certificate from Maruti Suzuki India Limited System Audit Rating - Shield from Maruti Suzuki India Limited 5 Star Award from Hyundai Motor India Limited Manufacturing Excellence Award from Maruti Suzuki India Ltd Best HR Initiatives Award from Maruti Suzuki India Ltd (Several awards in the preceding years too)
16	Reliance Industries Limited, Hazira Manufacturing Division	2007	Plastics and petrochemicals	Naptha cracker feeding downstream fibre intermediates, plastics and polyester	1991	ISO 9002 ISO 9000 ISO 14001 OHSAS 18001.	2010 - DuPont Safety Award Fortune Global 500 list of the World's Largest Corporations Financial Times' FT

							Global 500 list of the world's largest companies only Indian company to get a perfect score from CLSA Asia-Pacific Markets (CLSA) in a list of Asia's best companies in terms of CSR and termed the Company as the region's 'Corporate Good Guy'. Six Sigma Excellence Award in the category of 'Best Defect Elimination in Manufacturing'
17	Tata Steel Limited	2008	Core Manufacturing	Crude steel production facility and a variety of finishing mills.	1907	ISO 9001:2008, ISO 14001:2004 OHSAS 18001:2007	2011 - Prime Minister's Trophy 2012 - Deming Grand Prize 2012 - World Steel Safety & Health Excellence Recognition Award 2013 - Ranked India's 7th most admired company by Fortune magazine
18	National Engineering Industries Limited	2010	Core Manufacturing	Ball and roller bearings	1946	ISO 9000 ISO 14001	2002 - TPM excellence award 2012 - ACMA – 'The Technological Excellence Award' and 'The

							Manufacturing Excellence Award.'
19	Sanden Vikas (India) Limited	2011	Auto ancillaries	Automotive air-conditioning parts like Compressors, HVACs, Blowers, Receiver Driers, Hoses & Pipes, High Precision Machined parts and Injection Moulded parts.	1982	ISO/TS 16949 ISO 14001: 2004.	2003-2004 Trophy of Excellence 2004-05 Maruti Vendor performance 2005-08 Kaizen efforts 2008-09 Overall performance 2010-11 Certificate of Appreciation Renault Nissan
20	RSB Transmissions(I) Ltd, Auto Division (Jamshedpur(Unit 1), Pune & Pant Nagar Plant)	2013	Auto ancillaries	Propeller shaft, gears, and front axles, transmission castings,	1990	ISO / TS16949 ISO: 14001 OHSAS: 18001 welding certification of DIN 18800 as per European standards.	2005-06 Best Supplier Tata Motors 2007 - Enterprise Leadership Gold Medal

- Benchmarking
- Design of experiments
- Gauge capability studies
- Just in time and Kanban
- Lean management
- Measurement System Analysis
- Process capability studies
- Seven management tools
- Six Sigma methodology
- Total Productive maintenance
- Leadership and participative management
- New Product Development

Another interesting point is several non-Japanese companies including the Indian companies who have won the Deming Prize have actively participated in the AOTS (The Association for Overseas Technical

Scholarship) training programs. AOTS Regular Training Programs involve two types of training. One is "Technical Training" in which participants attend a "General Orientation Course" and move on to the individual technical training (commonly called "Specialized Technical Training") for acquiring specific skills. The other is "Management Training" which is designed to acquire the management knowledge and skills on business management, production management, etc., necessary for managerial people in developing countries, (<http://www.abkaotschennai.com/aots-training-program-in-japan.php>). These training programs typically cover topics related to production management, quality management, technology management,

environment protection, and intellectual property.

6. Lessons from the winners

A critical assessment of the award winning companies' strategies and objectives clearly demonstrates a company's commitment to quality and a leadership focused on quality. While commenting on the lessons from the Balridge award winning companies it is stated there are several common observations, (Hodgetts, 1994), which can be summarized as follows:

- Formulate a vision for quality
- Involve top management from the start
- Focus on customer needs
- Develop the planning and implementation processes
- Train employees to use SPC tools
- Empower employees
- Recognize and reward employees
- Follow continuous improvement

These observations very well hold good for the Deming prize winners who have claimed that people and tools along with a proper vision makes it to the award. A strong foundation in TQM makes a company excel in quality and ensures a lasting relationship with all the stake holders. Typical parameters of success for these companies include leadership, commitment to quality, people management, and trust. Further, it is important that all the employees undergo training in the use of statistical tools so that they can use the data available to make better decisions.

The most recent winner of Deming Prize in India, namely RSB has the TQM initiatives as follows, (juse.or.jp., 2014).

- TQM model
- Training on basic concepts of TQM
- Policy management
- Daily work management
- Continual improvement
- Appointment of consultant for training on TQM

- Policy deployment
- Structured daily work management
- Focus on increasing customer satisfaction
- Focus on improving the technical capability
- Improving new product quality
- Cross functional activities and improvement in Kaizen

However, there is a counter argument about the awardees as reported by two authors (Kovacs and Sharkey, 2014) who have studied the prize winning books in term of ratings and reviews. They infer that the rating had a dwindling effect subsequent to the announcement of the award and continued to decline as more and more people started observing the award winner. While these comments are made in the field of book publishing, no such study has been made with respect to the quality award winners, and no parallels can be drawn. However, the observation is worth remembering because award-winning companies may not receive the same level of recognition or status after winning the award.

7. Conclusion

Quality awards have created a special status for the winning companies who in turn inspire others to emulate them and become winners. The proliferation in the number and variety of awards has given a new impetus for the companies all over the world to compete and improve their quality. Many countries have instituted quality awards which encourage the companies to participate in the assessment process. Winning the award is not the lone objective, but learning from the process both before and after the award. This means the organizations are ever willing to learn and improve their processes. This paper has covered a detailed analysis of Deming Prize winners from India to reveal how these companies were able to raise the quality bar and became internationally known as committed to quality. The TQM approach

has made the companies to improve their overall performance and become role models in their sectors and domains. It is gratifying to note that some of these Indian companies winning the Deming Prize make it the first instance of its kind outside Japan. However, basking in the glory is not the issue here, but the learning from these companies. The intention of this paper is to provide a summary of these learnings so that other organizations can pick up a few threads and start improving the process. Awards, of course, do have their criticisms. The award attempt is itself a costly process and not every company can afford the cost of training and hiring international consultants.

Apart from this, the employees will have to undergo additional stress as they have to carry out many tasks besides their normal duty. In spite of all the efforts, it is not a guarantee that the copay will win and hence enough courage and endurance are required to withstand the trauma of not getting the award after several years' of efforts. Hence the paper wishes to convey the message that it is not the award per se that should matter but it should be the learnings that happen along the award journey and also the vital feedback that is received from the examiners' which provides a guideline to improve the quality

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