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A SERVPERF Based DEMING'S PDCA Mechanism for Quality Improvement of Management Educational Institutions

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Abstract*: *There are serious quality issues with higher education in developing countries. To change this situation and to accomplish appropriate quality it is essential to implement drastic techniques. Management Educational Institutions (MEI) needs to understand the customer centric philosophy. The application of Service Performance (SERVPERF) to measure quality performance providing service through institutions, also finding characteristics and quality components that meet the requirements of student as a customer of the system. The reliability and factor loading of 21 factors seen. Regression, correlation and anova also been tested. In MEI, the students are consumers of the services provided by the institution. Our paper gives the background theory and goes on to outline the results of a study on post graduate Business Administration students from particular MEI to get students outlook on models to improve quality of institutions. Based on outcome of SERVPERF Deming's PDCA cycle is established for further quality improvements of these institutions.

Keywords* : *Deming's PDCA cycle, Management Education Institution (MEI), Quality Improvement, SERVPERF

I. INTRODUCTION

Any organization through service triumph provides a competence to service provider in boosting image through constantly satisfying or going beyond customers' service expectation. The stakeholder's expectation should be studied regularly to respond the prevailing trends.

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The faculty administrators and the academic staffs to plans and implement modalities for improvement in an educational institution should use the results of the study. Management education in India started way back in 1950s. Indian Institute of Social Welfare and Business Management was the first institute providing MEI. Whereas today, more than 1600 business schools disburse management education at the under graduate and post-graduate level in India. This has intensified the competition among the business schools in attracting good students. Increasing number of MEI strengthened the race for admission into premier institutes among the students. The victory depends on ability to reliably crater the expectations of its customers. Berry and Parasuraman [1] argue that the ability to meet the customers service expectation consistently or exceedingly is crucial key to the success of service organizations. In an educational institution, the students are inputs and output for the process taking place; in addition to being the consumers of the services provided by the institution. It is important to understand their expectations from the institution as well as from the faculty members.

Quality management is generally a customer specific concept. Defining who the customer of a MEI is complex. Though there is generally an agreement among the researchers that the students are the customers for an educational institute, there are certain concerns. Some researchers argue that the institutions treat the students as customers ignore the needs of the society at large [5, 7, 11]. In business schools, lot of importance is given to the industry expectations of the management graduates. According to [12] the management graduates produced by the business schools are recruited by the industry; so industry needs to assess the quality of education imparted by these business schools while deciding on recruitment from these schools. The goal of MEI, to serve students with academically sound and employable by the industry. Such a goal been rewarded if and only the responses to the courses set in the MEI, are good and the people capable of accomplishing the goal. The students along with the industries, which employ those who successfully graduate from management education institutes are to be treated as clients [4, 18]. Hence, both students and industry are the clients of the MEI. Quality management system of the MEI should target both students and industry. But the improvement in quality of the institute requires all the stakeholders like faculty, students, parents, industry and society.Quality management and improvement strategies should also include the faculty members.

Members of faculty are the people who are in charge of process implementation in a business school. In order to meet the industry expectations, the curriculum is updated on a continuous basis. However, the students' ability to successfully absorb the inputs provided by the business school depends on their perspectives about, "what their expectation of management faculty are?" is met. However, the success of the business schools in meeting their twin objectives is a function of not only the quality of the students enrolled for the program but also their ability to absorb the class inputs effectively.

According to [10] the importance of quality in service has increased considerably lately, through large amount of books and papers applying Total Quality Management (TQM) concepts in the service sector. Zemsky et al., [20], argued the uncertain track record of TQM in higher education, the current thinking been clear: faults and happenings of the earlier practitioners and industry should be used as a lesson with TQM efforts. SERVQUAL scales used in large number of published studies and the original model of SERVQUAL was advanced by [15].

Cronin and Taylor [8] suggested a substitute model to SERVQUAL measure SERVPERF. In the SERVPERF model, [8] proposed, scales taken were service quality of a provider to assess and compare between perceived and expected service quality. They argued that a separate survey for customer expectations is unnecessary, therefore it was done based on only the perception component of SERVQUAL quality measurement. In their model, summary of individual ratings 22 items of SERVQUAL questionnaire measured the quality on a one-dimensional scale categorizing the quality level. In our study, the approach considered the most related question framed by the authors to identify the factors affecting the quality of MEI. Also, this study applies Deming's concepts of quality to a MEI. Deming himself has suggested that quality management principles can be applied to education just the way they are applied to manufacturing or service processes. Deming [9] concluded, improvement in education and management needs application of similar ideologies used for improving any process, manufacturing or service. Dr. Deming, the father of TQM developed a model, before and during Second World War out of his own experience in US industry. Deming's quality improvement process is called Plan, Do, Check and Act (PDCA). This PDCA cycle, gainfully applied to a MEI to improve quality. Though his principles were originally meant for industrial sector, they are applicable to any organization that indulges activities to meet a well-defined goal. Deming's work is applicable to any organization advocated by Brown as quoted by [3], and argues that Dr. Deming's work applied in the field of universities, services organizations, corporations, families, countries and certainly to schools.

II. METHODOLOGY

In business schools the effort and commitment of the institution and its faculty members should be reviewed regularly to identify education and services quality provided for students. Also, questions related to service quality should be answered. The five factors are Effectiveness of curriculum, Effectiveness of mentoring, Effectiveness of holistic growth, Assured service, Effectiveness of classroom absorption.

First, Effectiveness of curriculum attributes soft skills like communication, team work and hardcore skills in the area of systems and analytical aspects. The second attributes friend, advisor, role model and an agent for the overall development of self-esteem. Mentoring assumes special importance in management education since students come from various backgrounds. Mentoring and guidance handles issues like fear, complex, ego, anxiety and gets the students ready for their role in companies. Third of attributes helps holistic growth progress of the students. The Assured service set four attributes, the Promises made to the students about the services, student's performance review, and guidance on industrial exposure. The fifth is delivery skills, motivation, curricular and co-curricular activities and subject knowledge. These are essential attributes for the management faculty to facilitate effective knowledge absorption in the class room. Our study indicates the mechanics of the application of PDCA cycle to MEI through relating the ways and means by which the PDCA cycle can be applied. It is applied based on outcome of SERVPERF methodology.

A. Research questions

Our study intents to answer the following questions of the SERVPERF:

1) Level of quality service in education?
2) Does disagreement exist between stakeholder expectations and perceptions in the service provided?
3) Most significant determinants of overall quality of service in business schools?
4) Potential areas that can be improved?

B. The Instruments

According to [8] SERVPERF instrument was tested and found to be very effective and the authors adopted the same SERFPERF methodology to assess the quality of MEI with modified components. Our data been collected through an instrument developed with 21 questions targeting to get a clear representation of different attributes. The answers provided through a Likert-type 5-point scale fixed as (1 – strongly disagree to 5 – strongly agree) based on [16]. Our study based on quantitative in nature and uses a probabilistic sample, as considered by [17].

C. Data Collection

The study was performed in four business schools in Coimbatore, Tamilnadu, India. The population parameter considered as 480 students with (95% confidence level, ±5% confidence interval), 302 as minimal sample calculated. The researched institutions were offering a minimum of five specializations such as financial management, manufacturing and operations management, IT and systems management, marketing management, and human resource management. SERVPERF methodology was assumed as the instrument to measure service quality. Studies from [14, 15] concluded, no consensus in the works regarding the best instrument, SERVQUAL was selected as its been tested in a similar work from [19].

D. Data analysis

The data fed as input in an electronic SPSS spreadsheet and statistical analysis conducted using the same SPSS software. Validity and reliability (Cronbach's alpha) of the survey instrument been tested. The questionnaire responses are analyzed through factor analysis, in order to prioritize the attributes in terms of their importance. Correlation and Regression analysis were tested to find the predictive validity of the instruments. One-way analysis of variance (ANOVA) carried out to identify significant difference among the mean factors. Finally, the mechanics of Deming's PDCA cycle is carried out for the quality improvement of institutions based on the finding of SERVPERF questions.

III. RESULTS

A. Reliability and Factor Analysis

The Cronbach alpha coefficient ranges from 0 to 1, higher the score more reliable the generated scale [13]. Table 1 gives all the dimensions of 5 alpha values along with factor loading. Varimax rotation optimizes the factor structure and the significance on the data equalization of the twenty-one attributes. Off the total variance, 57. 283% is obtained as a byproduct of rotations of all the attributes and five factors (components) extraction.

B. Predictive analysis

Correlation significant of the five dimensions at 0.05 level shown in Table 2. Mentoring was observed with low correlation compared with other 4 dimensions. Lowest correlation (0.519) observed between mentoring and assured. The highest correlation found between curriculum and absorption (0.799).

Linear regression results were shown in table 3. The R^2 value 0.732 specifies 73.2% of variation is the five independent variables with overall service quality. 95% confidence interval the study been tested and observed four variables are significant with $p \leq 0.05$ except the mentor variable found non-significant $p \geq 0.05$. The regression model is

OVERALL= 0.633 + 0.289 (CURRIC) + 0.061 (MENTOR) + 0.290 (HOLISTI) + 0.179 (ASSURED) + 0.231 (ABSORP).

The reduced regression model is observed in table 4. Only four variables seen in table 4, since β (0.061) value found very less and non-significant compared with other variables in table 3. The reduced model specifies the differences of service quality as effectively full model, confirming the insignificance of responsiveness in determining the variations in overall service quality. To associate full and reduced regression model, see [6].

C. One-way ANOVA

After data reduction ANOVA is carried out to identify significant difference among the mean of the overall rating of the institution.

Hypothesis

H_0: There is no noteworthy difference among the factors affecting the quality of MEI with reference to overall rating of the institution. Symbolically, (H_0: $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$)

H_1: There is an appreciable difference among the factors affecting the quality of MEI with reference to overall rating of the institution. Symbolically, (H_1: $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$)

Since the 2 tail significance, value of the factors such as Effectiveness of curriculum (0.701), Effectiveness of mentoring (0.862), Effectiveness of holistic growth (0.534), Assured service (0.433) and Effectiveness of classroom absorption (0.304) are greater than the level of significance (0.05), hence accept H_0. Therefore, there are no glaring difference in the relationship among the factors affecting the quality of MEI with reference to overall rating of the institution in Table 5.

IV. APPLICATION OF PDCA CYCLE

The action plan for quality improvement arrived at with Deming PDCA mechanism with the help of the above findings through SERVPERF questionnaire.

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Table-1: Dimensions of the instrument

	Factor loading
Effectiveness of curriculum (α=0.873)	
Impact of curriculum on Communication skills	.771
Impact of curriculum on Computer skills	.740
Impact of curriculum on Technical skills	.735
Impact of curriculum on Managerial & teamwork skill	.709
Impact of curriculum on Analytical skills	.640
Effectiveness of mentoring (α=0.792)	
Faculty members encourage students to participate in Inter Collegiate events	.757
Faculty members are able to give the right sort of guidance to the students to participate in the various inter collegiate events	.663
Faculty members have sufficient academic stuff	.596
Faculty members encourage the involvement of parents in the improvement of students	.577
The faculty members encourage students to give feedback by interacting in the classroom	.514
Effectiveness of holistic growth (α=0.831)	
The Internship Programmer is helpful to put into practice the theoretical knowledge acquired in the class rooms	.781
The students given a chance of interacting with the alumni of the institution	.722
Students are given adequate exposure to the industry through Internship Programmers	.667

Mentoring system is helpful and motivating	.517
The institute having a constant contact with the alumni of the institute	.508
Assured service (α=0.807)	
A continuous evaluation technique is adopted to evaluate the performance of students	.645
Right kind of attention is given on the objective of conducting the management programmer	.624
The teaching and learning process are as per the promises made	.613
Effectiveness of classroom absorption (α=0.796)	
Faculty members are very supportive and are ready to solve any queries regarding subjects	.708
Students are given the right guidance and advice regarding the industry interaction	.687
Library Facilities	.501

Table-2: Correlation coefficient

Variables	CURRIC	MENTOR	HOLISTI	ASSUR	ABSORP
CURRIC	1.000				
MENTOR	0.575	1.000			
HOLISTI	0.772	0.615	1.000		
ASSURED	0.703	0.519	0.749	1.000	
ABSORP	0.799	0.605	0.701	0.737	1.000

Table-3: Regression results for full model

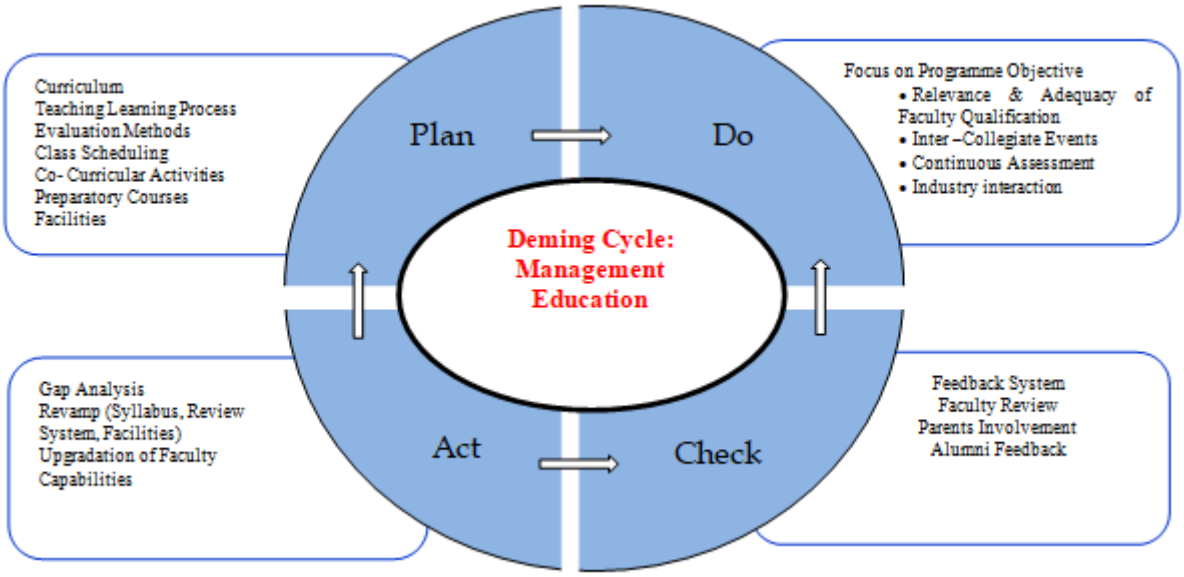
R	R^2	Adjusted R^2	F
0.829	0.732	0.735	100.376*
	Beta	**T**	**Sig.**
Constant	0.633	4.645	0.000
CURRIC	0.289	4.300	0.003
MENTOR	0.061	2.821	0.201
HOLISTI	0.290	3.281	0.002
ASSURED	0.179	2.940	0.001
ABSORP	0.231	3.822	0.000

Table-4: Regression results for reduced model

R	R^2	Adjusted R^2	F
0.821	0.729	0.731	118.150*
	Beta	**T**	**Sig.**
Constant	0.631	4.612	0.000
CURRIC	0.278	4.167	0.002
HOLISTI	0.282	3.174	0.000
ASSURED	0.174	2.811	0.000
ABSORP	0.219	3.813	0.000

Table-5: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Curriculum					
Between	3.015	5	0.603	0.599	0.701
Within groups	297.985	296	1.007		
Total	301	301			
Mentoring					
Between	1.923	5	0.385	0.381	0.862
Within groups	299.077	296	1.010		
Total	301	301			
Holistic Growth					
Between	4.128	5	0.826	0.823	0.534
Within groups	296.872	296	1.003		
Total	301	301			
Assured					
Between	4.880	5	0.976	0.976	0.433
Within groups	296.120	296	1.000		
Total	301	301			
Absorption					
Between	6.028	5	1.206	1.210	0.304
Within groups	294.972	296	0.997		
Total	301	301			



Source: Compiled by authors
Figure 1. Deming's PDCA Cycle for MEI

A. Plan

The goals of any MEI to produce students who are able to perform well in the examinations and are employable by the industry. These twin objectives are to be set as targets for processes. These processes include the following:

- ✓ Curriculum planning has to be contemporary and meet the industry's standard.
- ✓ Teaching learning process should be varied to include case studies, role plays, group discussion, projects, brainstorming, management games, industrial visits, seminars, lab sessions, guest lectures by industry experts, etc. The teaching learning process should bridge the gap between the curriculum and industry's demand from management graduates.
- ✓ Evaluation methods should provide useful feedback for improvement of students and should not be just an assessment mechanism for providing grades alone.
- ✓ Class scheduling should encourage effective classroom learning. The most productive hours should be used for learning and utilized to facilitate best learning environment.
- ✓ Co-curricular activities widen the knowledge of students to be planned and made an integral part of the program. These activities include book review clubs, functional specific clubs, entrepreneurship development cell, cultural clubs, quiz club, etc. An extensive extra-curricular events and support services improve the students campus life, these activities encourage the all-round progress among students and facilitate their talent development pursuits.

  Students joining MEI come from different disciplines such as engineering, arts and science. The competency levels of these students therefore vary depending on their basic education and exposure. In order to bring all the students to a common plane preparatory and soft skills courses are to be planned. These courses should impart skills like cognitive, technical, communication, presentation, analytical, problem solving and behavioural.
- ✓ The facilities that are required for translating the plans into a reality include sufficient number of classrooms, labs with adequate number of computers with internet facility, library with books that cover a wide range of relevant topics for management graduates. The library should provide choice of books for contemporary topics.

B. Do

- ✓ Classroom teaching must keep in mind the objectives of programs offered to the students. Classroom teaching must ascertain the learning and teaching capabilities of the students and faculty respectively and appropriately pitch the courses and sequence them properly.
- ✓ Relevance and adequacy of faculty qualification and experience for management education. Continuous updating of faculty knowledge by encouraging them to attend conferences, research publications, sabbatical to industry, etc. In addition to these MEI can enter into Memorandum of Understanding with institutions that enjoy better rankings and resources for faculty exchange program.
- ✓ Students from one institution can learn from interactions with students of other MEI. Such an interaction can happen in inter-collegiate events.
- ✓ Examinations should be made continuous assessment system. This will provide ample opportunity for identifying weak students and plan for their improvement.
- ✓ Interaction with industry should be scheduled on regular basis. This will facilitate the following:

- Students of MEI can understand the expectation of the industry from a management graduate. They work towards meeting this expectation during the program.
- Guest lectures by industry experts can teach the current industry practices.
- Industrial visits makes students understand the industrial operations.

C. Check

Evaluation system should continuously assess the students' performance. It should include a combination of various techniques like examinations, quizzes, viva voce, presentations, *etc.*

- ✓ The system of evaluation should also provide useful feedback for performance improvement. It should throw up data on weak and bright students. Small groups of students can be relegated to each faculty member. Individual interactions with the students may help find the reasons for their poor performance and try and help them overcome hindrances. Similarly, bright students should be encouraged to reach greater heights through special attention and mentoring.
- ✓ The Faculty review should provide a valuable feedback to the faculty with respect to their performance in classroom, curriculum planning, organization of the courses, classroom management, choice of the pedagogy, provision of timely and useful feedback to the students, use of innovative practices. This exercise highlights the strengths of the faculty and also to outline the teaching aspects to be changed by the faculty.
- ✓ Feedback from parents on academic activities, infrastructure facilities, ability of the wards to cope up with the pressures of the program can be important inputs.

Alumni feedback can throw light on the gap between the knowledge acquisition during the program and the industrial requirement.

D. Act

- ✓ The plans and its implementation should be continuously monitored for their effectiveness in meeting the goals set.
- ✓ Revise the syllabus, upgrade faculty capabilities, refine teaching learning process, refine the evaluation system to fill the gap between the actual performance and the target performance required to meet the goals set.
- ✓ The assessment method must be complete and should comprise all the aspects of the process to determine the deficiencies and/or the scope for improvement. This requires that the institution should put in place a system of review of students' performance, faculty performance, adequacy and effectiveness of supporting systems.

As [2] puts it, 'the goal of perfection is bringing everyone to narrow the amount of variation within the system for improvement'.

V. CONCLUSION

Excellent instruction is important as quality coaching results in good caliber knowledge creating superior students and satisfied customers. Deming's PDCA is foremost supportive tool in learning and training in MEI for industrial field. It is necessary to make sure that every student benefits from the learning and training process to reach the standard of quality in education and placement. Implementation of Deming's philosophy requires the right attitude and method with the aim to continuously progress on all areas of responsibilities assigned. This model adopts particular SERVPERF tool to enhance learning and training quality that also helps in the identification of important factors affecting the quality of MEI. In order to continuously improve teaching, learning and assessment method, it is necessary to judge the existing performance by the students. For any of these attempts, improvement must be qualitative and reliable in the evaluation procedure of Deming's PDCA mechanism. Since the students of management education are drawn from different disciplines in the undergraduate level they need to be hand held through the MEI weeding also the confusion, fear, anxiety, and complex. Commitment from the top management is extremely important for the successful implementation of this mechanism. Top management should put in concerted, visible and constant dedication. It also requires commitment of all the stakeholders as well. According to Deming, an organization is a system and all the people who work within the system are an ongoing process. Hence the commitment to total quality management in an organization should be holistic and should surpass all levels. Deming's PDCA cycle serves as a perfect model for ensuring such an organizational widespread commitment. Implementation of Deming's PDCA cycle will help management institutes to improve quality of service provided to the student-customers.

REFERENCES

1. L. Berry and A. Parasuraman, "Prescriptions for service Quality," American Organizational Dynamics, vol. 20 (4), 1992, pp. 5-15.
2. M. Blankstein, "Lessons from enlightened corporations," Educational leadership, 1992, pp. 71-75.
3. R. Brandt, "On Deming and school quality: conservation with Enid Brown," Educational Leadership, 1992, pp. 28-31.
4. S. Brigham, "TQM lessons we can learn from industry. Change," 1993, pp. 42-48.
5. M. Brower, "The paradigm shifts required to apply TQM and teams in higher education," Total quality management, 1991, pp. 485-97.
6. S. Chattergee, B. Price, "Regression Analysis by Example," John Wiley & Sons, New York, NY. 1991.
7. M. Cloutier and Richards, "Examining customer satisfaction in a big school," Quality progress, 1994, pp. 117-119.
8. J. J. Cronin, S. A. Taylor, "Measuring service quality: a reexamination and extension," Journal of Marketing, vol. 56 (3), 1992, pp. 55-68.
9. W. E. Deming, "Out of the crisis," Cambridge, Mass.: Massachusetts Institute of Technology. 1988.
10. J. A. Dotchin, and J. S. Oakland, "Total quality management in services, part I: understanding and classifying services," International Journal of Quality & Reliability Management, vol. 11 (3), 1994a , pp. 9-26.
11. S. Helms, C. Key, "Are students more than customers in the class," Quality progress, 1994, pp. 97-99.
12. A. K. Laha, W. B. Viswa Bharati, and Shantiniketan, "Quality in management education- A meta-analysis of recent B-school surveys," conference proceedings at the national conference on quality of life organized by (IAPQR), 2002.

13. J. C. Nunnally, "Psychometric theory" (2nd Ed,). New York: McGraw-Hill. 1978.
14. A. Parasuraman, V. A.. Zeithaml, L. L Berry, "Servqual: A multiple-item scale for measuring consumer perceptions of service quality," Journal of Retailing, vol. 64 (1), 1988. pp. 12-40.
15. A. Parasuraman, V. Zeithaml, L. L. Berry, "Conceptual model of service quality and its implications for future research, "Journal of Marketing, vol. 49, 1985. pp. 41-50.
16. A. Parasuraman, V. Zeithaml, L. L. Berry, "Reassessment of Expectations as a comparison standard in measuring service quality: implications for further research," Journal of Marketing, vol. 58 (2), 1994. pp. 111-124.
17. L. M. Rea, and R. A. Parker, "Research methodology: from planning to execution," SãoPaulo: Pioneira, (in Portuguese). 2002.
18. L. Rubach, B. Stratton, "Teaming up to improve US education.," Quality progress, 1994. pp. 65-68.
19. V. A. Zeithaml, A. Parasuraman, L .L. Berry, "Delivering quality service – balancing customer perceptions and expectations," New York: The Free Press. 1991.
20. R. Zemsky, W. F. Massy, P. Oedel, "On reversing theRatchet," Change, 1993. pp. 56-72.

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