

Title: A Critical Review of "Organizational Turnaround: Understanding the Role of Cutbacks, Efficiency Improvement, and Investment in Technology"

Course:EMGTTerm:FallYear:1997Author(s):N. Deshpande

Report No: P97059

	ETM OFFICE USE ONLY
Report No.:	: See Above
Type:	Student Project
Type: Note:	This project is in the filing cabinet in the ETM department office.

Abstract: A paper titled "Organizational Turnaround: Understanding the Role of Cutbacks, Efficiency Improvement, and Investment in Technology" is critically reviewed in this individual report.

A Critical Review of "Organizational Turnaround: Understanding the Role of Cutbacks, Efficiency Improvement, and Investment in Technology"

N Deshpande

EMP-P9759

# EMGT 520 Management of Engineering and Technology Fall 1997 Instructor: Dr. Dundar F. Kocaoglu

Paper Evaluated: Organizational Turnaround: Understanding the Role of Cutbacks, Efficiency Improvement, and Investment in Technology. IEEE Transactions on Engineering Management, February 1997 Authors: Kamala Arogyaswamy and Masoud Yasai-Ardekani

· ~ ~

**Evaluator: Nikhil Deshpande** 

#### I. SUMMARY OF THE PAPER

This IEEE Transaction paper is an attempt to investigate the strategies adopted by the managers of declining manufacturing firms for turnarounding. It studied over 200 manufacturing firms and studied the role of cutbacks, improvement in efficiency and investment in technology in turnarounding of these firms. The paper starts with the 5 propositions partially based on previous research and attempts to examine their validity based on the actual findings. Authors studied sufficiently large sample of the firms for 8 years of duration of study and tested their propositions. They found many results supporting the propositions but some results were interestingly contrary to the proposition. Also it was observed that the result of turnaround may not be singly attributed to one of these factors but could be rather cumulative effect of multiple factors. It was also shown that these three factors may not be necessary and sufficient conditions for turnarounds. The authors obtained following results:

- 1. Although cutbacks are assumed essential by the managers to organizational turnaround, it does not guarantee the turnarounds.
- 2. Cutbacks may not necessarily mean increased efficiency. Many firms that adopted cutbacks as their strategy for turnaround, ended up resulting in nonturnaround.
- 3. For organizational turnaround, increased efficiency is very important. Appropriate cutbacks may act as a tool to achieve increase in efficiency.
- 4. Although investment in technology is important for organizational turnaround, great care must be taken to invest in appropriate technology.
- 5. The three factors mentioned above should not be considered as individual agents but rather the interrelation between them acts as a turnaround agent for a declining firm.

Finally, authors stress not to use their findings as a recipe for turnaround and urge managers to consider the situation on more subjective basis by considering factors such as internal and external problems, nature of industry and effects of recession.

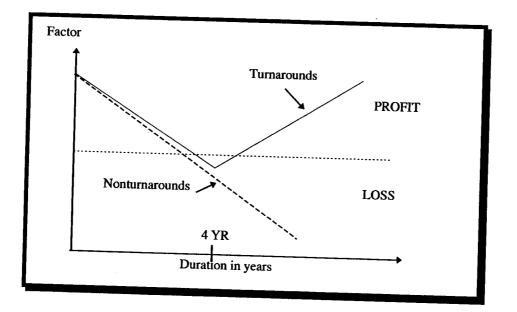
#### **II. PAPER METHODOLOGY**

The authors first define the organizational turnaround as the situation when a firm that has experienced sustained performance is not only able to arrest further decline but is also able to recover and become healthy again. This definition allows them to place the firms categorically in turnarounds or non-turnarounds. The period of 8 years was defined as observation window and the statistical regression model was used to decide if firm is turnaround or nonturnaround. This decision criteria is mathematically accurate as far as the period of observation is selected to be appropriate for the type of industry. If the nature of regression curve is as shown in following figure for the factors such as:

- Cashflow
- Net Income Margin
- Return on Invested Capital (RIC) ٠

then the firm is classified as turnaround. After defining the decision criteria, authors state 5 propositions based on the previous research and knowledge. Those are:

- 1. Both turnarounds and nonturnarounds adopt cutbacks when faced with decline.
- 2. When compared to nonturnarounds, a larger proportion of turnarounds are able to manage cutbacks to obtain improved efficiency.
- 3. When compared to nonturnarounds, a larger proportion of turnarounds are able to realize improvements in efficiency.
- 4. When compared to nonturnarounds, a larger proportion of turnarounds show increased investment in technology.
- 5. When compare to nonturnarounds, a larger proportion of turnarounds supplement improvement in efficiency with increased investment in technology.



Next, authors studied 204 firms and attempted to investigate the strategies adopted by both the turnarounds and nonturnarounds. Their findings shed a great deal of light on how some factors may play important part in the organization turnarounds.

#### A. Cutbacks

The research findings showed that the proposition 1 is true in majority of cases. About 58.6% of turnarounds and 73% of nonturnarounds resorted to cutbacks ( the management theme of 90's) when faced with decline.

# B. Cutbacks and Improvement in Efficiency

The findings supported that 82% of turnarounds managed the cutbacks to improve efficiency while 48% nonturnarounds did so. The majority of turnarounds in this case suggests importance of relationship between cutbacks and efficiency. The paper later stresses that cutbacks may not necessarily mean improvement in efficiency and managers should take precaution when cutbacking to make sure that the final result is improvement in efficiency. It should be emphasized here that authors beautifully describe the interrelation between these factors and their effect on organization turnaround.

#### C. Improvement in Efficiency

Research findings support the proposition 3 in majority of cases. The findings indicated that 73% of turnarounds improved efficiency while 49.6% of nonturnarounds could achieve it. Authors have done a fine job in defining *increase in efficiency* using measures described in the appendix of the paper.

#### **D.** Investment in technology

The paper concentrates on expenditure in R&D and plant equipment as a measure of *investment in technology*. Their findings showed that about 86% of both turnarounds and nonturnarounds increased investment in plant equipment. Thus there is some ambiguity if this factor does play an important role in organizational turnaround. However as far as R&D expenditure is considered, 81% of turnarounds increased them while 65% nonturnarounds increased R&D expenditure. The authors state that these findings provide only partial support to their 4<sup>th</sup> proposition.

# E. Improvement in Efficiency and Investment in Technology

It was observed that 62% of turnarounds improved efficiency and increased expenditure for improving plant equipment while only 40% nonturnarounds adopted the same style. Also 67% turnarounds supplemented improvement in efficiency with investment in R&D while merely 40% adopted similar strategy.

Some of the findings obtained in the research were conventional however research revealed many interesting trends that have emerged in last 8 years. The discussion section of the paper discusses these findings and helps clarify the role of various strategies associated with organizational turnaround.

#### **III. DISCUSSION IN THE PAPER**

The role of cutbacks seems to be quite important in the minds of turnarounds and nonturnarounds however what makes **company** A resorting to cutbacks a winner as compared to **company** B following the similar strategy is "appropriateness of cutbacks and proper management of them". The cutbacks can simply act a deteriorating agent if improperly managed. They may be necessary but definitely not sufficient. The case studied here is of <u>Servus Rubber</u> who cutbacked in plant equipment and quality which resulted in further decline. In this part of discussion, the authors refute the connection of cutbacks with improvement in efficiency as portrayed by many previous researchers [3] [13][27].

The improvement in efficiency helps politically (by increasing stakeholders support), promotes short time financial improvement and is instrumental in

organizational turnaround. There are many ways to improve efficiency without resorting to cutbacks. Here, a case study of <u>Hollender manufacturing company</u> is described where instead of personnel cuts, CEO took paycuts of 25%, placed a slab of 6.5 times lowest salary of their employee on their salary, improved inventory system, increased training, optimized plant layout resulting in making 30-40 parts instead of 3-4 part before. This is a classic case of turnaround which did not resort to cutback for improving efficiency.

The study results strongly support the importance of investment in technology as a turnaround strategy. The examples given are, <u>Chrysler</u> and <u>Caterpillar</u>. However very interestingly, it was observed that even nonturnarounds increased investment in technology. Then what made them a *loser*? The authors think of possible explanation of choosing inappropriate technology and inability of these firms to manage them when declining. This explanation is viable and probably major reason why some firms turnaround while some failed to do so.

From authors' point of view, based on this study, the interrelation between improvement in *efficiency* and *investment in technology* is very crucial. These factors if properly managed complement each other. First helps increase control, gain stakeholders support which eventually helps realize the other. Firms adopting both, would be in better shape than the firms resorting to only one of them. The case studies described here are of <u>Chrysler</u> and <u>Caterpillar</u> who improved efficiency (partly by cutbacks) with appropriate investing in technology. Another case is of <u>Servus Rubber</u> who improved the organization situation by changing its approach (instead of cutbacks). They awarded 20% share to their workers, improved quality, identified new niches and improved marketing. Their boots for fire fighters (a new niche) was a great success that helped them turnaround.

## IV. COMPARISON OF THIS PAPER WITH OTHERS

This paper is a good example of quality of research expected from prestigious journals such as IEEE Transactions. The paper collaborated with the previous researchers and mostly supported their findings except when it came to role of cutbacks. Many researchers considered improvement in efficiency important for turnaround however they used terms *cutbacks* and *increased in efficiency* interchangeably. For example, D. B. Bibeault, in his book "Turnaround strategies: How managers turn losers Into winners" considers that cutbacks result in improvement in efficiency. However efficiency in technology management can not be simply defined as ratio of profit and number of people. It is more complex than that. Researchers such as H. M. O'Neill [18], D. C. Hambrick [13] and Theitart [27] stressed that cutbacks result in improvement in efficiency. This paper does not agree with them. In other words, it stresses, the equation of **Cutbacks = Efficiency** may not be true in reality. Also it stresses that cutbacks is not a recipe of turnaround. There are internal and external factors that need to be considered when deciding strategies for organizational turnaround.

The paper collaborates with findings in [17] that describe importance of investing in technology as a tool for aligning the declining business with fast changing environment. It supports that organizational decline is triggered by maladaption to both internal and external pressures of organization, inefficient operations and human resources problems. It suggest to address both the internal and external problems need addressed for successful turnaround.

In [25], it was observed that turnarounds and nonturnarounds, both invested in new equipment and organizational changes. However difference lied in the combination of thought and action. The nonturnarounds failed to recognize the importance of innovation in strategy and building organizations that are responsive from the top to bottom. It stressed that most European industries failed to adjust and innovate the strategy continuously in a fast changing world. The results obtained in this paper are somewhat consistent with those obtained in [25]. The authors stress importance of investment in R&D for turnaround which is one of the long term strategy adopted by the turnarounds.

# V. STRENGTHS AND WEAKNESSES OF THIS PAPER

We observed following as the strengths of this paper.

- 1. Clear Measures of Cutbacks, Efficiency and Investment in Technology (as in
- 2. Sound method of proposition and testing them on the case studies basis.
- 3. Clear and Concise Language.
- 4. The samples size and duration of study is quite appropriate.
- 5. Clarity in stating the objective and achieving it.
- 6. The authors have taken great care in alerting the reader not to assume their paper a recipe to the turnaround. They mention clearly that individual situation needs to be considered on subjective basis and by addressing internal and external problems.
- 7. The discussion method of supporting each findings with few case studies is very appropriate. It helps reader understand the role of each factor on the case to case
- 8. One section is completely dedicated to why some firms failed to turnaround even when they adopted many strategies mentioned in this paper.
- 9. The paper is formatted in typical IEEE Transaction format with appropriate appendix

The weaknesses in this paper are very few, a typical characteristics of IEEE Trans. papers. One of the weakness, was that the paper did not mention the composition of firms in their study on the basis of the technology they are in. This will be very important factor when comparing firm A to firm B. Also factors such as nature of such industry, political reasons and possibility of recession must be taken into consideration when comparing. It may be useful to provide a *pie chart* that shows this composition. It should be made sure that those industries have same long term characteristics. For example, it would be inappropriate to compare the decline of TV industry with turnaround of timber industry.

The other factor of concern is the duration of regression fit curve. For some industries period of 8 years may not be appropriate. The paper allocates 4 years of duration between strategic action and the results which may be inappropriate for some firms. However because of strong statistical modeling and the decision tree in the selection process used in this paper, it is unlikely that the authors misclassified firms in turnarounds and nonturnarounds.

## VI. CONCLUSIONS OF THE PAPER

The paper insists that the *cutbacks* may be an aid to organizational turnaround but it should not be construed as necessary agent for it. The paper's contribution to the previous literature lies in their findings that cutbacks do not always increase efficiency. In fact, many previous researchers have used these two terms interchangeably. The paper refutes this relationship. The main factors that play an important role in the organizational turnaround are *increased efficiency* and *investment in appropriate technology*. The **authors treat increased efficiency as short term strategy and investment in appropriate technology as long term strategy.** It is insisted that both strategies must be pursued for organizational turnaround, and merely one of them does not lead to turnaround.

Finally, authors warn readers not to treat these conclusions as a recipe to the turnaround but encourage to take factors such as internal problems, nature of industry, performance of competition and effect of recession into consideration.

The conclusions are clear and are the result of study findings and sound judgment. Every conclusion is justified on the basis of statistics obtained in the study and within the realm of the parameters in the research, it could be depended upon.

## VII. ADEQUACY OF REFERENCES

Authors have done a fine job in citing the references related to their work. The paper is bold enough to challenge the results obtained by previous researchers and clearly mentions their work in the references. It was seen that there were some significant revisions before the paper was accepted for Transactions and the authors gratefully acknowledge the role of three anonymous reviewers in making the paper better. The paper was published in Feb. 97 and is fairly recent. We could not find more recent paper on this topic in any of the following:

IEEE Transactions on Engg. Management Journal of Management Studies INTERFACES Strategic Management Journal.

Authors have cited some of the interesting books in their references. For example, [3] is the reference that asserts that cutbacks result in increased efficiency.

The article in Fortune [16] describes how Caterpillar turnaround after continuously declining for 4 years. The article is very useful for a case study which was partly included in this paper.

Based on our literature search, we recommend [3],[5],[[13],[16],[20],[25] and [27] as the minimum reading material. There is massive amount of information in them which is out of scope of this report.

Besides the references cited in the paper, we strongly recommend following books for general reading on this subject. The book by Suzanne Caplan, "Turn Your Business

Around: Hands-On Strategies for Long Term Survival" and the book by Mark Goldston, " The Turnaround Prescription". These are mentioned in the additional references section of this report.

#### **VIII. FUTURE RESEARCH**

It should be insisted here that the authors have done a fine job in their research within the parametric environment of the research. As a future research idea, this environment could be more extended. For example, it might be interesting to compare the turnaround strategies adopted by one type of industry to the other. This could give us an idea on how the strategies are different (or same) depending on industry. Also the study of period in this research is constant. It might be worthwhile to treat it as a parameter and investigate the effects of it on the strategies. By changing the period from low to high( say from 4 to 8 years), more light could be shed upon the appropriate short term and long term strategies. Also the research will then be able to address the concerns of small firms that could not afford a turnaround period of 8 years. Future work could also focus with greater precision on strategies to provide lasting improvement of a situation. Also greater attention should be paid to the contingent influence of business characteristics and the competitive environment. This would definitely help managers to select the most appropriate turnaround strategies.

# **REFERENCES IN THIS EVLUATION REPORT**

(References here correspond to that used in the original paper)

- [3] D. B. Bibeault, Turnaround Strategies: How Managers Turn Losers Into Winners. New York: McGraw Hill 1982.
- [5] D. Dauch, "Rescuing Chrysler from the brink," *Manufacturing Engineering*, pp-29-33, Feb. 1993.
- [13] D. C. Hambrick and S.M. Schecter, "Turnaround Strategies for mature industrial product business units," Acad. Manage. J., vol.26, pp. 231-246, 983
- [16] R. Henkoff, "This cat is acting like a tiger," Fortune, pp. 71-76, Dec. 19, 1988.
- [17] R. Moenaert, J. Barbe, D. Deschoolmeester, and A. De Meyer, "Turnaround strategies for strategic business units with an aging technology," in *The Strategic Wiley* 1990.
  [17] R. Moenaert, J. Barbe, D. Deschoolmeester, and A. De Meyer, "Turnaround strategies for strategic business units with an aging technology," in *The Strategic Wiley* 1990.
- [18] H. M. O'Neill, "An analysis of turnaround strategy in commercial banking," J. Manage. Studies, vol. 23, no. 2, pp. 165-168, 1986.
- [20] D. K. Robbins and J.A. Pearce II, "Turnaround: Recovery and retrenchment," Strat. Manage. J., vol.13, no. 4, pp. 287-309, 1992.
- [25] J. M. Stopford and C. Baden-Fuller, "Corporate rejuvenation,", J. Manage. Studies, vol. 27, pp.399-415, 1990.

[27] R. A. Thierart, "Success Strategies for poorly performing businesses,", *INTERFACES*, vol. 18, no.3, pp. 32-45, 1988.

ADDITIONAL REFERENCE MATERIAL NOT CITED IN THE PAPER

- [1] S. Caplan, Turn Your Business Around: Hands On Strategies for Long Term Survival. New Jersy: Prentice Hall, 1994.
- [2] M. Goldston, *The Turnaround Prescription: Repositioning Troubled Companies*. New York: The Free Press, 1992.

Van lit minimut

.