

Downsizing: A Strategy that may be Hazardous to your Organization's Health

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Downsizing, as an organizational strategy has become quite popular. It is used to reduce labor costs in an effort to become more price competitive, especially internationally. There are, however, longer-term, somewhat hidden costs to downsizing that may raise doubts about that strategy.

Introduction

Downsizing has become an extremely popular strategy in today's business environment. It is used to reduce labor costs in an effort to become more price competitive, especially internationally (Nienstedt, 1989). Indeed, the number of reports of downsizing by firms like Drexel, Sears, CBS, Avon, GM, Northern Telecom, and even the Franklin Mint could leave one to believe that it has become "The Strategy" of today's business world (Imberinan, 1988; Zipper 1989). However, just as with many other such strategies, downsizing has costs (Ulm & Hickel, 1990; GM's downsizing has its pitfalls). Some of those costs have been overlooked and which may be sufficiently large so that companies need to consider those costs before deciding whether to use that particular strategy in their circumstances. Those overlooked costs result from increases in accident rates that may result when supervision is spread over more employees as the number of levels is reduced.

Downsizing (decreasing the numbers of levels in an organization) increases the span of management (Van Fleet & Bedeian, 1978). While decreasing levels of organization and increasing the span may decrease administrative costs (burden or overhead), it may have an impact on safety in those organizations.

Safety Issues

Safety is often seen as a job specific phenomenon. In that context, it involves the design of equipment, the design of jobs, attitudes, awareness, and the like (Peterson, 1980). At other times, safety is dealt with at an organizational level involving the presence or absence of unions, type of industry, and so on (Grimaldi & Simonds, 1989; Asfahl, 1984). Yet another viewpoint is to deal with safety at the supervisor's level. In that

context, the supervisor is seen as vital to the effectiveness of any safety program within a company. Given the vital role of the supervisor in safety matters, one wonders why the impact of reductions in the amount of supervision have not yet been studied.

Amount of Supervision

The amount or span of supervision has received considerable attention over the years (Van Fleet & Bedeian, 1977). Some of the results of that attention have been:

1. there is a wide range in spans in companies;
2. there is substantial variation regarding the correct span or amount of supervision
3. some writers do not even feel that the subject is particularly important; and
4. the empirical research provides little by way of clear guidance for managers.

Recent articles utilize a variety of techniques for studying spans, including mathematical modeling, simulation, queuing theory, results of small group behavior, and estimating relationships to other organizational variables (Van Fleet, 1985; Dewar & Simet, 1981). Each of these has provided further information about the span and has contributed to our understanding of the span of management.

Related Areas

There are three related areas to the span that provide a background for our discussion.

Span and Aspects of Organizations. Joan Woodward studied 100 British firms relating their "success" to production systems, technology, organization and span of control (Woodward, 1965). She concluded that the more successful firms had spans of control near the median value for all surveyed firms, while their less successful counterparts had span of control higher or lower than the median or most effective value. Other studies also pursued the search for a "correct" size including a substantial effort at Lockheed, however, no consistent "answer" was ever obtained.

Proper Span Varies. A series of studies has concluded that the proper span of control will vary considerably. Factors identified as causing that variation include technology, organization level, task routineness, supervisory specialties and measure of overall organization effectiveness (Van Fleet, 1983).

Unclear Role. Finally, a comprehensive evaluation of the diverse literature on the span identified conceptual models, provided an extensive bibliography, and suggested several variables related to span (Van Fleet & Bedeian, 1977 and 1978). However, because of questions about research methodologies and because of conflicting results obtained by some of the studies, there seem to be no clear known relationships between span of control and organization performance.

Injuries and Amount of Supervision

The specific relationship between the amount of supervision and work injuries has seldom been noted (Gephart, 1987; Shafai-Shrai, 1977; and Cohen, Smith, & Cohen,

1975). A survey of Michigan manufacturers suggested that supervisors helped to reduce work injuries and texts on safety management mention the relationship, but there has been very little research on the topic (Shafai-Shrai, 1977). This dearth of research led us to try to find out just what that relationship is in order to more fully assess the downsizing strategy.

Chemical, paper and wood product manufacturing firms were studied with questionnaires, interviews, and on-site visits. 140 firms participated in the study. The estimated monetary cost of work injuries to employees was calculated based upon data supplied by the firms regarding their own experiences. These costs included the direct or insured cost of any fatal, lost time and medical or doctor cases and an estimate of the additional amounts of money beyond these costs required to cover workmen's compensation insurance premiums. In addition, indirect, non-insured costs of work injuries were estimated to be equal to the direct cost of work injuries. Therefore, the total estimated cost of work injuries was calculated to be the sum of the direct cost of work injuries, estimated additional monies paid to insurance carriers, and estimated indirect costs of work injuries. These costs were calculated both in terms of total costs per firm and total costs per employee. The amount of supervision was calculated in both the traditional manner, the average number of employees per supervisor or span of control, and in terms of the cost of supervision per employee or a cost span of control.

The organizations in this study were chemical firms (which usually experience low numbers of work injuries), paper manufacturers (which usually with average numbers of injuries) and lumber and wood product producers (often with poorer than average work injury experience). In addition, an effort was made to include firms of different sizes ranging from small (employing fewer than 50 employees) through medium (employing between 50 and 199) to large (200 or more total employees).

In each group of firms (chemical, paper, lumber/wood and small, medium, large) the average span for those firms with the higher injury rate was greater than was the average for those with lower injury rates. Further, the difference was greater for those firms in the paper and lumber/wood industries, which tend to experience higher accident rates than it was in the chemical industry, which tends to have lower accident rates. There was a clear, strong relationship between the amount of supervision and accident injury rates suggesting that more supervision tends to lower accident rates. These firms, which have sufficient numbers of first level supervisors, frequently have fewer work injuries. This may be because such firms have sufficient supervisors to better coordinate work activities and to provide communication and other forms of assistance which would help reduce work injuries to the workers under their direction.

The cost span of control or cost of supervision per employee was calculated and then was related to the cost of work injuries per employee by means of multiple linear regression (Rinefort, 1977). The results indicate that the expenditures per employee for additional first line supervisors resulted in reductions in the cost of work injuries per employee nearly large enough to pay for the extra supervision alone. Thus, when coupled

with other savings from improved safety and other possible benefits resulting from such supervision, these savings should make the additional supervision well worthwhile.

The cost of this needed additional supervision can be partially justified in terms of employer costs of work injuries reduced by such supervision. If the cost of additional supervision could also be partially justified for other reasons, such as improvements in productivity or quality, then these factors coupled with the partial justification in terms of work injuries might make the provision of such additional supervision appropriate and desirable. However, if productivity increases with larger spans, then the firm faces a tradeoff between safety and productivity (Rinefort & Van Fleet, 1993).

Summary

These results would appear to be of value to manufacturing firms, primarily those in the chemical, paper products and wood products sectors, particularly in these times where increased emphasis has been placed on performance and cost control. In addition, because of the lack of other studies on this subject, they may also be of interest to organizations in other sectors of the economy. On the other hand, these results suggest the possible importance of more supervision at a time when one major trend may be toward less or even no supervision.

It may well be that the relations reported here hold only for "normal" operating circumstances. When an organization downsizes, it may well create such a different working environment that these relations would not apply. Studies of quality circles, autonomous work groups, and other approaches which reduce supervision clearly need to include criteria related to accident behavior to more fully answer this question (Van Fleet & Griffin, 1989; Taylor, Friedman, & Couture, 1987). However, based on these data, to the extent that an organization's safety record is a measure of its health, downsizing may be hazardous to an organization's health!

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