

Managing for Profit

The Art and Science
of Making Money
Managing a
Dental Laboratory

2nd Edition

•Peter Stein•



Another management service of the
National Association of Dental Laboratories



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National Association of Dental Laboratories

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Preface

There is no escaping the fact that managing a commercial dental laboratory in today's fast paced and constantly changing business climate is, at best, an ongoing challenge. In order to survive and be successful, it will take an ability to develop a balance of experience, technical skills and managerial aptitude. This is not an impossible goal for those now in or striving for a position of leadership in today's business world.

The need for improving these management skills has long been recognized by the National Association of Dental Laboratories. Commercial dental laboratory owners are usually outstanding in their technical competence and dedication to producing quality prostheses. Yet, when it comes to sound economic and management practices, too many laboratories fall short of the mark. It is because, in many instances, laboratory owners and managers have a background based on training as technicians, not business managers.

Over the years, NADL has made major efforts to increase the body of management knowledge throughout the dental laboratory community. Publications on management, on laboratory design and layout, on government regulations and on uniform accounting systems have all been popular and, as a result of time, are all being revised to meet the needs of the modern-day manager. This book, *Managing For Profit*, has been completely rewritten and expanded to provide a practical,

common-sense guide to operating a commercial dental laboratory. It is written in easy-to-understand language and emphasizes the "how to" approach of laboratory management. The book is divided into nine major sections, with each section subdivided into chapters. It is designed to help readers evaluate their understanding of the material and measure their own laboratory's performance in the areas covered.

The aim of this book is to provide readily applicable guidance, practical advice based on experience of successful laboratory operations and a hands-on approach to managing specific situations. *Managing For Profit* points out the basic business operation areas which require attention and provides various means to deal with decision making and problem solving. This book is dedicated to the members of the National Association of Dental Laboratories as part of the Association's continuing effort to aid and assist dental laboratory owners and managers in improving their management skills, increasing the profitability of their businesses and making this a better industry in which to work and make a living.

Robert W. Stanley
Executive Director
National Association
of Dental Laboratories

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The staff at NADL national headquarters certainly deserves much credit for their persistence in seeing this project through to its conclusion and for their efforts in manuscript typing, editing and production of this book.

ABOUT THE AUTHOR

Peter Stein, who has served as NADL's Director of Business Management Services since 1969, is Director of the Bureau of Business Research at Southeastern University, Washington, DC, where he is also an Adjunct Professor. He is well known in academic and dental health care circles and is the author or co-author of several books on dental laboratory management including *How to Manage a Dental Laboratory*, 1971; *Managing for Profit—the Art and Science of Making Money*

Managing a Dental Laboratory, 1976; and the *NADL Standardized Accounting System*, 1977.

A graduate of the Syracuse University School of Management, he holds a Masters Degree from the George Washington University Graduate School of Government, Business and International Affairs. He has also completed advanced studies at Harvard University's John F. Kennedy School of Government, the Federal Executive Institute, the Navy Postgraduate School, the Army Management School, the American Management Association's *Management Course* and numerous other professional development programs.

The winner of outstanding professor awards, Small Business Administration "Man of the Year" award and awards and recognition for research and writing, Mr. Stein has developed and conducted seminars and workshops on business management, particularly dental laboratory management, throughout the United States and as far away as Australia. His achievements resulted in his inclusion in "Who's Who in Government." He is a leader in numerous organizations dedicated to improving both public and private management and is a member of the American Academy of Management.

He is the author of a regular column entitled, "Let's Talk Business," in NADL's winning magazine, *Trends & Techniques*. His efforts to advance the welfare of dental laboratory owners and managers has been recognized in a variety of ways.

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Section I

Introduction

This section is intended to explain why there is a need for a book on dental laboratory management; the importance of good business management to successful dental laboratory operation; failures among small businesses and the reasons for those failures; what it takes to manage a dental laboratory and reasons for success.



Chapter 1

Why a Book on Dental Laboratory Management?

It's never been easy to operate a commercial dental laboratory and in the latter part of the 1980's it's harder than ever. A variety of pressures—economic, technological, social, environmental—all combine to make the need for good laboratory management more important, more vital than ever before in the history of the industry. Until the early 70's it was fairly easy to open a dental laboratory and to “make money” at it. In the last decade it has grown more and more difficult and is becoming ever more complex. If the owner-manager is to survive, prosper and grow, his /her success will not be based on technical proficiency, friendship with the laboratory's clients, or being a “good guy”, but on the ability to develop the balanced experience and philosophical approach necessary to operate the laboratory in a manner which will provide a reasonable return—a return equal to or better than a similar investment in time, energy and dollars would provide.

Commercial dental laboratories play an extremely important role in the overall U.S. dental health care delivery system. Successful laboratory operation is absolutely essential not only for the financial wellbeing of the individual laboratory owner but also for the economic health and wellbeing of dentistry as a whole and the health and wellbeing of those members of the general population who can benefit from improved dental care.

Today as never before dental laboratories must remain strong and economically viable. It is necessary that dental laboratory owners and managers respond creatively to the demands and offers of constantly evolving technological changes as well as social and economic changes in our society. With premier dental schools like Georgetown and Emory closing their doors, other schools merging (University of Kentucky, University of Louisville), and with the schools planning for continued operation slashing their enrollment, the “good old days” are clearly over for dentists. DON'T PANIC! Many dentists, up to now, made their income filling cavities; cavity prevention (fluoridation, dietary change) have cut into this aspect of dentistry rather dramatically. On the other hand, the growing numbers of senior citizens will continue to offer an open opportunity for dentists and dental laboratories.

The changes in materials, equipment, techniques, delivery systems (no-appointment store-front dentistry, open evenings and weekends, for example), increasing competitive pressures and shifting expectations of the public all combine to make successful, profitable operation of a dental laboratory more complex, more difficult and potentially more time consuming.

The need for improvement in the owner's management skill is not something new to the dental laboratory industry. It has long been recognized that although the nation's dental laboratories were technically outstanding, far too many owners were severely deficient when it came to knowledge or application of basic management principles and practices. The major management problem in many dental laboratories has, in fact, been the individual responsible for operating the laboratory. Due to the very nature of the industry the individuals who rose to positions of ownership or management (supervisors, department heads, general managers) did so with background and training as a technician and not a manager.

The National Association of Dental Laboratories has confronted this problem. In 1969, NADL initiated a program of business management seminars and workshops throughout the country. These programs were designed to acquaint owners with the importance of attention to management and to update the managerial skills in the industry. In addition, various management surveys have been and are being conducted and business management articles have become regular features in NADL publications.

This book is a significant part of the continuing effort of NADL to aid and assist laboratory owners/managers in upgrading and improving their managerial, supervisory and leadership skills. The book is targeted at helping the individual responsible for the laboratory's success to become more effective in all aspects of dental laboratory management. Our aim is to provide readily applicable guidance—practical advice based on experience of successful operations—and wherever possible guidelines for effective management of specific situations. Obviously it is not possible to provide coverage of all areas of day-to-day dental laboratory management. It is our hope that this book will serve to point out the basic business operation areas requiring attention and provide ways to assist the owner/manager in decision making, problem solving and dealing with the laboratory's staff and clients. In this way we will have helped readers help themselves by improving their managerial ability, thereby increasing their laboratory's profitability while making operation of the laboratory easier, more exciting and even, believe it or not, more fun!

Whether you are already a dental laboratory owner or manager or are thinking, planning and working toward such a position, the material that follows should be of help to you. ■

Chapter 2

The Importance of Business Management

Small business failures are reported so often and sometimes so dramatically that many people think the small business operator doesn't have a chance of ever succeeding. On the other hand, there is much publicity also given to the "overnight success." In 1985, over 215 businesses failed every single business day. The average loss per business was approximately half a million dollars. The pattern through the first half of the 80's was one of increasing numbers of business failures.

U.S. BUSINESS FAILURES 1979 - 1985*

1979	7,564	1983	31,334
1980	11,742	1984	52,068
1981	17,040	1985	57,067
1982	25,346		

* Source: Dun & Bradstreet

Although similar data is not available specifically for dental laboratories, Department of Commerce data reveals that in 1982 1,163 laboratories operated only part of the year and in 1984, 612 operated only part of the year. Since some went into business while others went out of business it's hard to tie the failure rate down but it is estimated to be between seven and ten percent of all laboratories during the first half of the 80's.

In addition to the figures cited above, which are for firms declaring bankruptcy, many, many more businesses, including laboratories, just close their doors and stop operating. The most frequent cause of bankruptcy is obviously an inability of the business to pay its debts (insolvency). There are also numerous cases of businesses going out of operation because the owners recognize that they just won't be able to "make it."

Most business failures, including just ceasing operations, occur during the early formative years. Over 50% of all business failures occur during the first 5 years, 10 to 30% in the sixth through tenth year and 15 to 20% over ten years of operation.

AGE OF BUSINESS AT FAILURE POINT

<u>Years in Operation</u>	<u>% Failed</u>
under 1	27.6%
1 to 2	13.8%
2 to 3	11.2%

3 to 4	10.1%
4 to 5	6.4%
6 to 10	9.3%
over 10	2.6%

There are many reasons for business failure. These are the most prevalent:

Incompetence	45.6%
Lack of experience	22.2%
Lack of management "know how"	17.5%
Lack of technical experience	11.1%
Neglect	1.0%
Disaster	0.5%
Fraud	0.3%

Dun & Bradstreet has kept records of business failures for many years and reports that the basic causes remain approximately the same from year to year. Almost 90% of all business failures are directly attributable to "poor management" with managerial incompetency representing the cause of almost half of all business failures. This is true of all sizes of business, including the nation's giant firms, but is most prevalent in small business.

In the dental laboratory industry the managerial problems would loom even greater since, as already noted, laboratory owners generally have the technical know-how required to produce the dental prostheses but little, if any, business training.

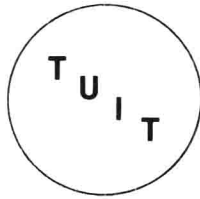
The Small Business Administration reported in one study that most business failures were directly related to four major areas:

- Lack of planning
- Inadequate financing
- Poor marketing
- Inadequate records

It is immediately evident that all of these are management related and, further, are regular recurring problems of most, if not all, dental laboratories. The statistics are clear — in general, one out of every three business enterprises fails within 3 years of opening its doors; over half fail within 5 years. Most of the failures are management-issue related.

Just as a good baseball or football player may not make a good team manager, a good dental technician can't just transfer his/her

technical competency to business management processes. With the pressures of day-to-day operations, many dental laboratory owners continue to do what they know and what they do best—they stay at the bench putting management off till “later” — till they get around to it!



By reinforcing their already present strengths and avoiding areas of weakness they make a bad situation worse.

The majority of dental laboratory owners often fail to manage as they should — even those that have some knowledge and experience in management. This failure to utilize the principles of management and its practices is often excused on the basis of size, i.e., “We’re too small, we can’t do what the big guys do.” That type of thinking is not only false but is extremely dangerous. Small laboratories require just as much, if not more, of an awareness and understanding of the principles, practices and techniques of management than larger ones and even the largest

laboratories often don’t perform too well in their overall management activities. Of course, most smaller dental laboratories operate under handicaps, at least in terms of not having enough people to specialize and become experts in the various aspects of laboratory management; however, they also have definite advantages. The small, closeknit, compact staff of most laboratories provides a flexible, quick response capability and a level of communication often hungered for by larger organizations.

Modern business management techniques have reached a highly specialized state of development. The management sciences make available, via the computer, numerous analytical tools. All sorts of equations and formulas are available to generate innumerable graphs, tables and charts. Managers are continually being faced with more and more things to do, to tend to, to worry about while the time available to do all of this remains constant or in some situations even decreases. It is no surprise that many managers throw up their arms and retreat to where they are comfortable, they return to what they know best — working at the bench or dealing with clients or suppliers (sometimes “dealing” is just idle, time killing, chatter). If today’s dental laboratory owner/manager is to survive, he/she must learn to manage better. **Learning, however, is not enough!** The owner must also practice what he/she learns. ■

Chapter 3

What it Takes to Manage a Dental Laboratory

Those of our readers who own their own laboratories have already recognized the fact that independent enterprise is probably one of the toughest possible lines of endeavor. Instead of being independent, the small business owner often ends up with many more “bosses” than bargained for. Some of these are:

- Government (state, local, federal)
- Financers (banks, creditors, family)
- Clients (dentists, other laboratories)
- Suppliers (materials, equipment)
- Family (spouse, children, etc.)

Pressures exerted by these forces, often in conflicting directions, require a mature, well balanced personality. Thus there are personal as well as professional characteristics that are important to laboratory success.

PERSONAL CHARACTERISTICS

Drive and Energy — capacity to work long hours
 Self-Confidence — belief in own ability
 Commitment — long-term involvement
 Problem Solver — desire to overcome “road blocks”

Willingness to take risks — reasonable chance of success
 Willingness to Use Outside Help — Although “Self Confident” and “Committed,” not so ego-involved not to try to get outside help.

PROFESSIONAL CHARACTERISTICS

Social Responsibility—Ethical operations, compliance with standards, rules, regulations, laws.

Management Ability—Knowledge of or willingness to get “know how” of handling people, money, methods, materials. (willingness to get things done through others — delegation)

Modern Business Methods—Willingness to change and not use “we’ve always done it that way” or similar statements as an excuse for action.

Marketing vs. Production Orientation—Willingness to try to satisfy client’s needs rather than selling what can be made.

Analytical Approach—Willingness to ask WHAT?, WHERE? WHEN? WHO? HOW and WHY? WHY? WHY? and then WHY? again. ■

Section II

General Management

This section is intended to portray and explain the meaning of management—what a manager is expected to do; the functions of management—planning, organizing, integrating, measuring; and decision making. Other topics treated include communications, leadership, and performance measurement.



