JACK FRENCH

UP THE EDP PYRAMID

THE COMPLETE JOB HUNTING MANUAL FOR COMPUTER PROFESSIONALS

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JACK FRENCH

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Preface

You may wonder how a book like this came to be. After many years of implementing Data Processing projects, I finally paused for a moment to consider what I had really done that was worth mentioning. I remembered all of the programs, projects, computers, and the late and long hours I had given to this profession. Most of all, I thought of the many fine computer people who became lifelong friends, and of some of those I lost touch with.

Most of the pioneers did not know what would happen in computer technology. Consequently, each job was taken up on the basis of what seemed to be the best thing at the time. Few understood the consequences of their actions or their own capabilities. The latest technology was frequently the master determinate of the next job step. Most pioneers became moderately successful. All would probably agree that things could have been better if they had known then what they know now. They would have planned their careers differently.

While it is not possible to cram experience into the minds of new generations, this book is an attempt to reveal some of the factors the DP professional will face in the course of a data processing career.

Clearly, the United States could not function today without its computers, nor, more important, without its computer people, who perceive and create the computer systems that are behind most scenes of everyday life. Many computer professionals are thoroughly misunderstood by those not involved with the intricacies of automation. Don't let this bother you. It is hoped that this book will give you insights into how to plan your career, deal with the human equations, and get better jobs.

I express my sincere appreciation to Gerry Gilberg and Frank Evans, of Robert Half, Cincinnati, who struggled so valiantly to teach me what really counts in getting the best jobs for computer professionals; and, of course, to my client companies and candidates who testify daily to the excitement of what is going on in the real world of data processing.

JACK FRENCH

Cincinnati, Ohio
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One

Plan Your Data Processing Career

A DEDICATION

This book is dedicated to the business data processing (DP) professionals who are changing America by means of the most significant new industry of our time. Since 1960, the DP industry has encompassed the lives of millions who have contributed their time and life energy to exploit computer technology, to provide companies with increased profits, and to generate a better way of life for all of us.

Often obscured by company images and exploitation, the DP professional can be compared to the miners of the early 1900s. Without a union or a Mother Jones, educated data processors have been left on their own frontier to procure good positions and increased income. In many cases, DP people have been able to achieve a good standard of living, but they have in general received only a small part of the results of their efforts. The demand for computer talent already far exceeds the supply. During the 1980s, the supply will fall short of the demand. Salary levels will increase significantly despite schools' and manufacturers' training programs, intended to meet industrial needs.

PROFESSIONAL LOYALTY

In general, companies have failed to recognize the true value of investment in the DP specialist. In fact, some company tactics actually prohibit free bidding for people possessing valuable DP skills. Consequently, the DP person has developed professional loyalty rather than company loyalty. Data processing activities have more frequently been organized on the basis of service centers to companies, rather than as integral parts of business operations. Because of the specialized training required for DP persons, some companies regard DP staff as mere technicians with little talent or

potential for promotion up into other parts of the business. While accountants, salespeople, and engineers move to the leadership positions, DP professionals are often relegated to supporting roles.

This book is meant to help you plan and develop your DP career to the maximum of your capability. Unfortunately, you have not had time or the experience necessary to understand the job improvement process or the technique of exploiting your own abilities. Years of training, study, and work experience leave little time to learn and plan the system of raising your responsibility and income levels to the maximum and at the right time.

In twenty years of directing major computer systems and programming developments, I have held top jobs with national companies. I have seen individual successes and failures, well-managed projects, good operations, and management banzai charges, in which careers were crushed and individuals destroyed.

Every week, I get calls from companies wanting to hire the best DP professionals. Some of these companies understand the value of top-grade performers. To fill the need, DP personnel leave one company and join another, looking for a better opportunity to accelerate their career. You may leave a good company to work for a worse one, because you do not understand job evaluation in terms of a career plan. You may just sit and wait, hoping you will be chosen for a better position or higher pay. You may find that your work is recognized only when you have accepted another offer. You may even succumb to the ever fatal counteroffer. Career problems are sometimes perceived where none exist; solutions may be perceived to nonproblems, and frequently the wrong solution is applied to the real problem. You yourself may be the real problem.

Some of the following circumstances may cause you to think of changing jobs.

Your salary is not competitive with that of other DP professionals of equivalent experience.

Your overtime is taken for granted.

You have been passed over for advancement. New bosses appear in positions for which you qualify.

Your work gets little recognition.

Your boss will not recommend you for a higher position or experience-enhancing assignments.

There are no positions into which you can advance.

Promises are not kept.

There is no means to keep up with the state of the art in hardware or software.

Management politics are too thick.

Staff turnover exists due to poor administration.

Company fringe benefits are low.
Your job simply isn't enjoyable any more.

Before you make any irrational decisions, you should understand why some professionals move up and why others just move. The reason data processors move frequently to achieve advancement has to do with the life cycle of a specific system, and their career timing. The activity of creating and installing a new system is worth a major company investment, but once the system is installed, the maintenance function is thought to be worth considerably less. Remember, there are no permanent jobs in data processing. The day of the gold watch is over.

THE CHALLENGE

The forecast for the DP job market in the next decade is excellent for all classes and levels of DP specialists. Catch-22 is that premium DP jobs, those offering the best opportunities for continuing education, personal satisfaction, and advancement will still be difficult to identify and obtain in your career schedule. The competition will be hot and heavy. Like the Boston Marathon, many will start, but many will collapse when they meet the competition. Fewer will stretch out ahead of the pack, and only the best will achieve number one positions in their pyramid.

There are few shortcuts. If you could see the rough terrain ahead, you might even choose another field for a career. Many DP pyramid heads today are not sure how they reached their position. Some do not even deserve their title and have retired on the job. In some situations, their bosses are not yet fully conversant with DP technology and are reluctant to make a change. This situation is altering quickly, however, owing to the high cost of hard-to-find DP professionals. In DP there can be no retirement. You either progress up or out. The new breed of computer professional will force companies to maintain only the best at the top of the pyramid, or else everyone will leave and no one will join.

Electronic data processing (EDP) turnover is expected to go above 60 percent annually for college-educated personnel. Companies still can't seem to understand the uniqueness of today's DP specialists. Few will understand your addiction to your field except other addicts. To be good at what you do in computers requires addiction. It has a psychology all of its own, tied to our times. What it will do to you is your choice. Long hours, isolation, discipline, frustration, and pressure can leave their mark on your personality. Properly conditioned DP professionals need not accept their profession as part of the age of indifference.

The power of the computer is only in its infancy. The sophisticated devices and software of 2001 will make today's hardware and software look like Model T Fords. It is no secret that the industrial age is giving way to

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the computer age in ways no one imagined even twenty years ago. Your importance to the creativity of our times over the next twenty years cannot be overestimated. Your contribution to our civilization will demand as much time and work as any other professional who influences history. Computer specialists are frequently akin to artists, musicians, writers, and other researchers who effect change in civilization. Your perception of what you are doing at every point in your career makes the difference.

In the political world, metamorphosis starts with people of words and ideas, followed by revolutionary fanatics, who finally succumb to the administrators. Then the cycle begins again. So it is in the cycle of computer systems. New computerization is conceived and planned, followed by implementation/conversion, which finally turns into maintenance—until the planners commence the cycle once again. Careers are enhanced when DP people ride the crest and don't get caught in the trough.

Many words have been written about how to get interviews, offers, and jobs. This book is addressed expressly to the EDP professional and concerns the many factors that directly affect recruiting, hiring, and promotion to key positions. Your job will occupy a large portion of your life. It is fundamental to your psychological and mental well-being to enjoy it and understand it. The DP profession is not for everyone just because it pays well. The profession may at first glance appear narrow, but on further examination, you can see that the span of talents required includes many disciplines and broad general knowledge. It will strain your capacity to learn and drain your emotions at times. Computerland is not for the weak or narrow-minded. The major systems are a strange blend of human interaction and programmed response. You are the renaissance men and women of the future.

It is hoped that this book will give you insight into your career. Job hunting for the sake of another dollar is not purposeful. Job hunting for a totally satisfactory and broad career is the purpose. Realism and humor must prevail. Your career is a struggle at best, but you might as well know up front what to expect. The agony of defeat and the ecstacy of accomplishment are both there, in spite of your best-laid plans. Frequently, your ability to do a job has almost nothing to do with your ability to get hired, but the results of this fact can be humiliating.

The full scope of your career involves several factors. Depending on where you are in your career, each of the following factors will affect your judgment of what is best for you. This book is organized around these factors of DP job selection.

Your Objectives and Goals

Location of the job
The industry

The companies within the industry
The job class and level of experience
Business applications
System activities
Technical activities
Technical functions
Computer hardware and software
The boss
The pay scales

If you are successful, you will hold many positions in your DP career. Each will be evaluated on its own merits in your climb up the pyramid. Every time you change jobs, you will sell the skills you have acquired previously, but you must also acquire new skills to trade in the future for the next job. It is an iterative process, a metamorphosis, and you have to avoid getting in a loop.

You may first want to scan this book quickly for its organization and reference, then go into detail. Definitions are important, and some time is spent on the meanings of words, to avoid confusion.

ACTION REQUIRED

If you value your career, you must plan it as diligently as you perform your day-to-day job. You must be ever vigilant for opportunities for advancement at the beginning of new system developments. You must analyze bad job situations where no advancement is possible. You must continually improve your own competence and skills in many business areas. Data processing must and will support business activities, not vice versa.

The rest of this book is about improving your DP career. It is a guideline for your planning and should provide a systematic approach. It is not a cookbook of recipes for explicit results. Only you can write that book in your lifetime in data processing. You must continuously prepare yourself to get the best jobs. I assume you want it straight, so here it is. Remember Crane's Law: There is no such thing as a free lunch.

> All experience hath shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed.
>
> Declaration of Independence
> July 4, 1776

Two

Know the Organization of Your Company

THE BUSINESS HIERARCHY

The business hierarchy of a typical company is displayed in Figure 2-1. It is essential that you understand the typical business hierarchy and its terminology, so that any position in your DP career within a company can be accurately evaluated. The business pyramid establishes an overview so that your DP career potential can be properly appraised relative to companies and jobs. Your detail resume should be created and maintained using common business terminology. You will then be better able to discuss your background with prospective employers and achieve responsible positions more quickly.

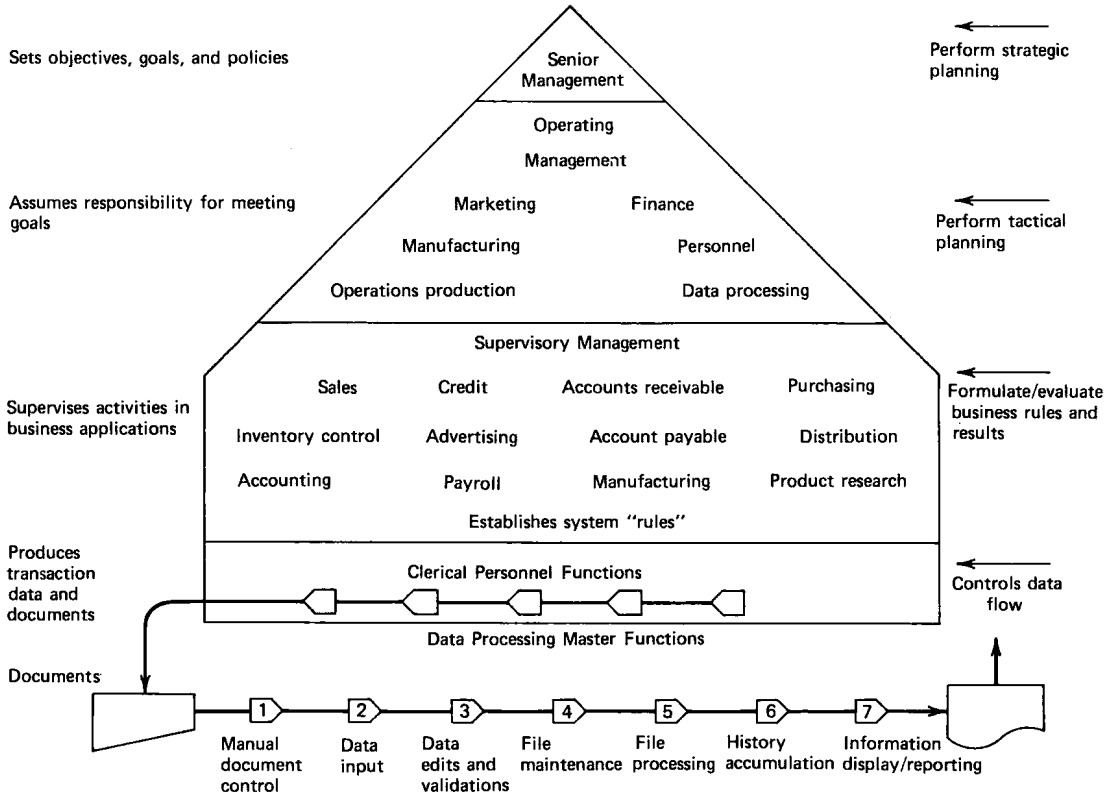
Clearly, data processing supports the pyramid of most major companies. It is important that you appreciate how DP functions support all aspects of your company's business. The following section starts at the top of the business pyramid and describes the various levels of management. The definitions and terminology used should be helpful in placing your DP career from the perspective of business operations.

Company Objectives and Goals

Senior management establishes company objectives and goals. Policies are established to provide rules that guide company personnel in attaining objectives and meeting goals. Strategic planning is necessary to ensure that the objectives and goals are right for the company.

Business objectives are usually expressed as strategic statements of long-term purpose in terms of the followng.

Enduring, timeless, and continuing guidelines
Strategic and policy decisions
Company products, services, reliability, prices, and profits



DATA PROCESSING FUNCTIONS FORM THE BASE OF MOST LARGE BUSINESS OPERATIONS

Figure 2-1 The business hierarchy.

Examples of typical business objectives are:

To increase business profits
To maximize return on invested capital
To outperform competitors
To achieve growth in sales and physical sites
To increase productivity
To control complexity
To provide quality products and services
To maintain and support highly competent management

Examples of some well-known slogans depicting these objectives are:

"Service is our most important product"
"Serving America through research"
"Better life through electricity"
"Your protection is our business"
"The system is the solution"

Business goals supplement company objectives. Goals differ from objectives and are expressed as specific (one-time) targets for planning and tactical action by operating management, attainable within a given timeframe, usually a year. Examples of business goals are:

To introduce product X by August of this year
To increase sales by 9 percent this year
To decrease payroll expense by 4 percent this year
To install a new order entry system in nine months
To install 30 percent more computer capability by year's end

Business goals are usually the result of the joint planning efforts of senior and operating management. Knowledge of major goals is important to you in order to ensure that your prime assignments relate directly to those goals. If you don't know the goals, you may find yourself maintaining the old systems, limiting your management exposure, and losing out on assignments that could significantly advance your career.

Company objectives usually change slowly and require some significant long-range planning to identify. Company goals to meet those objectives may be adjusted quickly as a result of economic conditions, available resources, consumer needs, available technology, or governmental actions.

Examples of objective and goal changes can be found in the effects on oil companies of the recent shortage of crude oil. The chain effect can be observed in auto companies in the rush to provide more economical automobiles. Changes in computer technology have provided lower hardware costs, and consequently, the minicomputer appeared, making computers available for more and smaller companies. Obsolescence takes its toll. Technology makes it possible to introduce more labor-saving devices but often requires more technically qualified personnel to build and operate the new robots of our time. Remember that through it all: "Systems change, but instincts remain."

The last wave has not yet come in. In fact, the major storms are just on the horizon in the so-called free-enterprise system. Change is what we can count on.

Product planning and development time actually can take longer than the useful life of the product itself. Computer systems are no exception to this phenomenon. No sooner is the new business support system installed than it is unable to meet the ever changing needs of the business. The development cycle begins again and again.

If you are not vitally interested in these exciting events as they relate to your company's products you probably are not going to go too far in your EDP career.

Responsibility Centers and Organization

Responsibilities are assigned to operating management within a company and determine the structure of the company organization to meet objectives and establish goals. Typical responsibility centers are:

Marketing	Finance/accounting
Manufacturing	Administration
Engineering	Research
Operations/Production	Personnel
Distribution	Data Processing

"Responsibility" can be interpreted as financial, mental, legal, and moral commitments for meeting objectives and accomplishing goals. One of the major responsibility centers in a company is frequently the DP department. The pyramid head of DP is responsible for all the DP activities and functions. Many DP professionals do not comprehend the magnitude of the responsibilities of the head of data procesing. The managerial skills required to manage and direct a complex DP installation are far different from those

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