The Senior Manager's Toolbox

by

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Foreword

Business started as a way for a family to survive. Such was our ultimate source of business. Early management was not strongly evident in the family, as those who worked in the business were also the ones who received the benefits. Family members did not work for each other, but contributed to the welfare of the family as they were able.

Complications arose with introduction of apprentices and hired workers. Supervising the non-family workers became an effort in itself. We find early management where the family leader is also in charge of the work of others. The family still remained in charge of all functions, and received all business income.

With the industrial revolution, we find a work force, and businesses growing large enough so that they had to hire bosses to supervise the efforts of employees. These bosses did not function like modern managers, but were like agents, giving orders to workers, and receiving products, on behalf of the owners. Family members were more likely to be found running the business than working within it.

By the early 1900's the boss approach to management was found lacking, and we had the Scientific Management Movement that spawned the modern foreman. Work management became part of performance. The foreman became the leader of a team effort focused on generating group outputs.

With further growth, and a shift from family to corporate ownership, there was need to hire professional managers to operate businesses. We then began to encounter layered management systems, and various internal support specialties serving other organizational functions.

During the middle decades of the 20th century, Management systems ballooned in size and complexity. The Scientific Management Movement applied only to production work, not to office work. Attempts to apply efficiency principles to office workers were general failures.

By the 1970's, the inefficiency in management systems became so obvious that there were a series of experiments with various management efficiency programs. Perhaps the most encompassing and enduring management concept driving change during the later decades of the 1900's was management by goals and objectives.

These experiments were not successful, and management efficiency continued to deteriorate into the 21st century.

Organizational inefficiency was a part of the business environment. The times and needs supported the development of a new management science.

This work is founded on an industrial engineering study that began in 1983, during the middle years of our management-improvement efforts. This basic study was specifically addressed to the problem of inefficiency in management systems. It involved the application of the earlier principles of Scientific Management to the work of managing above the work-group level.

The original application of efficiency principles to work was during the development of the Scientific Management Movement, the early 1900's. It doubled the effective output from production workers. The first coherent application of these same principles to the work of management is the subject of this work. While this application is not complete, the potential is clear. The same sort of benefit may be expected in the performance of management and internal support.

We have over forty years of experience with management improvement programs, and we have forty years of continued growth in management and internal support relative to production areas. This is a work whose time has come!

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Chapter 1: Being Effective Through Others

The modern way to learn business skills is from mentors, from managers who are superior in experience and recognized position. This indicates a type of apprenticeship that can take many forms. Direct mentoring is probably the most personal approach. It is seen where some more-senior manager takes a junior under his or her wing and brings him along. The least personal is through general publication, as in this work.

In skill development through publication, we commonly have a manager with notoriety presenting his or her guidance in written form. It is as much a teaching as a recognized apprenticeship. The apprentice or student comes away with new performance abilities.

Can we learn business management from the writings of mentoring managers?

Let us examine this in terms of management, in terms of gaining something through the efforts of others. The one who is mentored learns to perform the same way that the one who mentors presents performance. If the author is an effective manager, and proves to be a skillful writer, the reader will also tend to become an effective manager. In this, it seems a reasonable direction for skills development.

The only sour note is in the lack of logical basis. We will find that many of these managers are not as effective in fact as they appear to be. They may well be more effective at presenting themselves than at gaining performance through others. While they are probably more effective in general than those around them, they are not highly effective in comparison to other managers who are found in the business environment.

In demonstrating this, I must begin by altering perception. We now generally approach management as the proper and effective exercise of authority. This is not the definition of management.

It does not address the foundational concepts by which management might be measured. There are other understandings that must be developed before the effectiveness of a manager will be clearly seen.

More than "What Managers Do"

To be a manager is to be effective. This is the reason for which a manager is hired, and the reason that stands behind their salaries. While there is considerable discussion on the meaning and scope of effectiveness, the practical definition is set by those who hire someone to be a manager. Their purpose for hiring also sets the purpose for committing the business resources to the process that hires and maintains a manager. Even this practical answer leaves the term without definition.

Finster Threadbare, a man who is unemployed in the usual sense of the word, is out of cash. He accosts two strangers in an alley with a knife and demands their money. On threat of their lives, they surrender what they have and Finster makes his getaway from the scene to enjoy the benefit of his ill-gotten gains.

Finster has accomplished something through the efforts of others. While it usually wouldn't be called management, it does come vaguely within the definition of the term.

The result could have been very different if the intended victim turned out to be Harold Sharp, undercover policeman. Harold might have pulled a gun and arrested Finster, performing a different type of management based on a very different plan of accomplishment. Harold would assure a very different valuable result through pretending to be a victim until Finster showed his purpose.

We generally address management as a subset of being effective. It is being effective in a business relationship. In management, the people have known roles to play; and their interactions are expected to be appropriate to the situation and social setting in which they occur.

Even in this restricted environment, there are many types of effectiveness that can be seen as management without being strictly business matters.

Lester Bind is running a management seminar, and finds himself in an older building that is uncomfortably warm. To keep his client audience alert, and to take advantage of the very pleasant outdoor temperature, he directs two of the attendees to "open a few of the windows, and let in some fresh air."

They comply, and everyone in the room benefits from the effort.

Lester has performed a very valuable piece of management, accomplishing a beneficial result through directing the efforts of others.

Lester is no business manager. He has no authority over those who are taking his seminar, and probably owes more to them, than they owe to him. Yet they did as he directed.

This is no puzzle, but rather a common situation that addresses the very real and very important concept of basic management. There is something in the way Lester handles this situation that makes gaining the desired result fairly certain.

Good management is little more than taking such actions as identify the valuable result more clearly, and increase the probability of gaining that valuable result.

Bill Dutts is the CEO of a mid-sized corporation that is undergoing a change in one of its home safety products, a small fire extinguisher. The heating plant on his main production building has failed on a cold winter night, leading to burst pipes in his maintenance and rework area.

Bill's sales department sees this as an opportunity. In following their plan, he directs his people to have about thirty of the older-line fire extinguishers moved from production into the rework area where most of the damage occurred; and invites in the local press. Having so many old units appear in the picture designated as a rework area makes it appear that there might have been some problems with the older units.

As part of the interview, Bill mentions that it was an accident that could have happened anywhere, but that the damage was not too severe. He was in the process of changing the older products out anyway. Bill also draws attention to one of his new units that he is careful to have with him in the picture.

The advertising value is probably greater than the cost of damage. The money that might have been spent in buying advertisement for the new product is used to clean up the area and replace the pipes.

This is clever and effective management, gaining through the efforts of others. In this case he gains through a news reporter.

Senior-manager tools are neither recipes for success, nor a set of specific actions and techniques for making things happen. They are rather attitudes and approaches that allow a manager to better see the opportunities and assess values. Actions can then be selected to increase the potential for generating desired results.

In its purest sense, management science is not a science. It is an art form, a human expression that has a set purpose. It is a practical art, one that recognizes a predefined purpose before there is meaningful management action. It is applied engineering; it is a way to get from where a manager currently finds him or herself to a desired result.

In this, it is an encompassing study. It is a study that involves directing people, the most complex of all resources, so that they accomplish desired results. Management includes a study in human behavior directed to how people perform in business relationships.

Was Finster, with the knife in his hand, attempting management?

The answer is not that simple. It was clear that Finster did not consider himself as managing something. He was looking for cash; and he used a known way to get it. The technique might have proven highly effective in his past experiences. He might have used robbery successfully many times before, and have proceeded with a good expectation that it would work again. His action followed from a practical decision based on the immediacy and urgency of his recognized need, and what he saw as the probable outcome.

Finster was obviously in a position to manage something, and took action accordingly. He may not have seen himself as trying to manage the situation, but that was the general effect. The question is actually one of attitude and approach; it is a question of whether we consider his efforts to be managed under our definition of the term.

Being effective is not limited to the boardroom. The CEO who is at home in the evening getting his young child to go to bed may be applying management techniques. He may be doing management just out of general practice, or may be doing so intentionally and with full knowledge of what he desires to accomplish and the means of performance he wishes to institute in others.

Managing, being effective through the efforts of others, is more a way of life than just a business skill. As a business specialty, it is socially limited to a business environment; and that environment to its fixed general purpose of profitability. Management is much more than a recipe for behavior.

Learning from Great Managers

Management is a practical art. It is not something that can be taught to those who lack artistic skills and attitudes. Effective attitudes and approaches are as necessary as knowledge and practical engineering.

In the introduction, I addressed learning from those with recognized reputation as business leaders. This does not mean that any specific artistic application is appropriate for others. We have much experience with formula type approaches to various areas of management endeavor. Such applications do not meet the requirements of a practical art, but rather provide a foundation for management technicians. The training can easily deteriorate into blind application of some specific technique; and applications that are effective for one often work only marginally for others.

Even where we have the good materials, we face a challenge in enhancing modern approach through learning from other able managers. There is a problem identifying the ones who are most effective so that we can learn from them. The popular direction starts with identifying those leaders in industry who have the signs of success in their management efforts. They have the desired personal salaries. They have the titles that give authority to their decisions. They have the respect of others who work for them; and they use this respect to gain results.

In one direction for analysis, these are people in positions that other managers would like to fill. They are the ones who have the markings of success that other managers desire to have.

Are these the managers from whom we should learn? It would seem sensible if a manager's goal was to be like them, and he desired to gain the same things that these others have achieved through their efforts.

One may have a gift for dealing with other people, a skill in selling his own importance and ability. You find another who started out with substantial wealth and was able to manipulate this to gain the desirable end. You find another who is shrewd in his economic decisions, being able to identify opportunities, and to capitalize on the economic mistakes of others. Such leaders are the ones who have something to market, some idea, concept or approach that has gained the desired results.

We have many examples where such managers present some specific understanding as a way to be effective through others. What I have to present is in a discordant voice, one that looks at these business leaders with a tighter analysis. It sees that they are able to accomplish things effectively, and others can learn to be more effective from them. My challenge is not that learning from these business leaders is not directed to improving what we now do as managers. My challenge recognizes that the whole approach is too limited. It incorporates all of the limits of the past; it continues past practices that may or may not serve the purpose of improved management.

Even as management is not strictly limited to gaining something in a business environment, great managers are not limited to being business executives. In fact, great business leaders are often difficult to distinguish in ability from those who come in second and third to these more-respected managers. It is often more by happy accident that one prevails over others of relatively equal skills and abilities. One just proves slightly better at getting good press than the others, and he becomes known while the others do not.

Are there even greater managers?

What of Karl Marx, who had an economic theory? He was not able to bring about any remarkable changes through his personal efforts; but he proved to be the foundation for a major political-economic division of humanity in general. His rather basic work was received and implemented, and it now controls the destinies of billions of people. He was effective at a level that can only be seen as many orders of magnitude above and beyond any of our so-called modern business leaders.

Of course, the first challenge from managers who are trying to increase their skills and abilities is that they don't want to accomplish anything like what Karl Marx was able to accomplish.

The deeper answer is that management is being effective; it is not limited to running a business. If what Marx did could be adapted to run a business, it is every bit as valuable to the manager as anything that he or she might learn from other managers who are less effective.

Consider the obscure and wandering teacher named Jesus. He had a three-year management adventure that ended in his death.

He was most certainly effective, which is one reason that I honor reference to Him. His impact is such that it has been continuing for more than twenty centuries and still seems to be growing. Can you learn business from Him?

The answer is not in common lore, but in seeing what He did to gain effect. It is looking beyond the proclamation that He could, as God on Earth, do anything He desired to do. It is in actually looking at how He gained performance through others, and seeing how it continues to be effective.

If any action requires that we be gods to make it happen, then it is beyond our personal ability, and we can look elsewhere. If not, perhaps we can find new tools.

As a short example, Jesus is seen in the writings to have directed the elements of the Earth, and they obeyed. Jesus is seen as directing spiritual beings, and they obeyed. Remarkably, Jesus did not exercise any authority over people beyond declaring that they do what was good and right for them. He did not exercise either power or authority over individuals or groups. He rather spoke in discouragement of the power and authority that others were exercising.

What He accomplished was not through the tools that are common to management actions today, but through encouraging each person to do what was most in their individual interests. He taught attitudes and approaches rather than applying rules and prohibitions, as the previous religious leaders had done.

Yet this wandering preacher was effective in a way that is hard to ignore.

Can we apply these tools today to good effect?

You bet we can. We have been presented with lesson after lesson on how to treat people, and it usually collapses back into the simple lessons that were taught by this preacher two thousand years ago. It is not that these are obscure lessons, but we managers, as a class, have been following one another around so long that we tend to lose sight of the real authors of our modern knowledge for dealing with people.

I don't offer this as some sort of religious treatise. I don't intend to teach how to address other people to be effective in dealing with them so that they become religious. My purpose is to unlock the potentials that we have allowed to have spirited away from us.

This is a book on performing management as work. Approaching management as a performance skill is not at the heart of modern management thinking. It is a relatively new teaching that only came into its own at the beginning of the twentieth century. The skill of gaining through large organized efforts was relatively rare until the advent of modern business corporations. Before then, it was pretty much limited to governmental activities and ships at sea.

The wisdom that stood behind great corporate managers of the distant past is chronicled in only a few recognized works. One possibility is the Satyrcon of Patronius, a work that addressed moral weaknesses in a Roman Emperor. Another, more to the point, might be The Prince by Machiavelli, which appears to be an advertisement for an early royal staffer. These are not given place as important teachings for modern managers, as they address handling situations that no longer commonly occur.

What this means is that there was no effective science of senior management prior to modern times because there was little senior management to use as a foundation. Our concept of senior management is unique to our time and place in history. We can learn general principles from those in the past, but the specifics of good senior-management practices will be built upon knowledge that is timely and immediate. The primary sources for older wisdom are in areas such as accounting, where bookkeeping techniques have been in continuous use for many hundreds of years. In other areas, we have learned techniques and approaches as was necessary.

This does leave the modern manager with a relative vacuum in guidance. We have been inventing senior management as we have gone along, building upon what seems most effective at the moment. This is especially true for corporate management, which has only come into its own in the last century. It is, in that sense, not unreasonable to do what we have been doing in learning better management.

It is unreasonable only in the sense that a better approach is readily available. It has been available since the origination of management science in the early decades of the twentieth century. It was here that modern management received its effective definition as to authority and responsibility. It is here that we developed the foundation for efficiency analysis and efficiency engineering. It is here that we converted the nineteenth century boss into the modern foreman.

What we learned at that time concerned managing to gain performance; but it was not carried effectively forward into middle and upper-level management.

Effective in a Business Environment

Let us return once more to Finster and his knife. Is this, or is it not, some sort of lesson that can be applied in a business environment.

The answer is even less clear than whether or not Finster is managing the situation. It is a question of where "being effective" is part of business management, and where it is something else.

The start is then to understand what business is, and what makes a situation a part of it. Would it be a business effort if, instead of being a ruffian holding a knife, Finster was a subordinate manager holding the threat of exposing his chief in-firm rival concerning a sexual indiscretion with the CEO's daughter? The threat of destruction would be just as real, and it would be applied with the same attention to personal purpose.

Consider that this corporate Finster believed that he was the right person to receive the current promotion on the grounds of moral foundation. Would this then support his decision to use his social-threat weapon for influencing a business-management decision?

Some would say that it was a personal matter, and not a business issue. Others would insist that this promotion decision is as much a part of modern management as any other decision affecting the design of management, so that its use would be essential for assuring a supply of shrewd people to perform management.

We obviously need a more substantial set of understandings if we are even to begin any coherent study of management.

For the purpose of starting this work, I will assume the definition of management to be "gaining through the efforts of others." This provides a foundation for determining what is and is not management based on purpose and direction of application. We can build upon this to define a management environment; and can assume that the management is support for the purpose of business. Then we have a way to answer the challenge raised by our corporate Finster, even though it may not be to the immediate preference of those who want a more restrictive or expansive definition.

The business is a managed organization with a purpose set by the product it produces, or the purpose given to it when it was initiated. With for-profit businesses, it includes the generation of profit. With non-profit businesses, it is some other purpose set in its initiating direction. It could be a charitable purpose, or a purpose in fulfilling a legal mandate.

If it is a purely personal need, as with Finster and his knife, then it has no business purpose and would not be considered anything beyond self-management. It would not be a business purpose, and his actions would not be within a business environment. The same would be true even if Finster was a manager dealing effectively with a rival. The action would lack business purpose; it would not be properly addressed as an action within the business environment.

If, on the other hand, Finster was an extremely loyal and dedicated manager, who was taking action to prevent a less-valuable asset from becoming a chief officer of the business, that could be defined as an action within the business environment. He would be managing the situation (using the threat) to maximize long-term business performance.

What this points out is that management is as much determined by purpose and attitude as by the facts of a situation. We have been too limiting in our more common viewpoint, looking at what managers do as management, instead of relating it back to the definition that best describes management. The business environment is where management is performed, whether or not it addresses what managers commonly do.

This is especially important when addressing senior management, where a substantial amount of profitable decision-making is performed in social and political arenas. We have opportunity to be effective when we accept learning from those who commonly are effective in social and political environments.

In a sense, we do have some indication that this is exactly what our recognized business leaders have been trying to do. We have a text on negotiating by a management leader who has had great success working in areas where businesses and big money must be handled through political dealings. We have a text on influencing people that would normally be considered as practical psychology. We have works that address influencing business people using appearances. These often involve dressing and grooming oneself to seem like a proper person.

The personal success and reputation that has been earned through these teachings indicates their usefulness. These are not business unique applications, but are common knowledge from other fields that can be effectively applied within a business environment.

With its more intensive focus on business purpose, the differences available in this work center on attitude and approach. Attitude and approach are not seen as wisdom drawn from other fields, but wisdom that is a natural part of management. This study is not limited to specific knowledge areas where there are applications that may be readily brought into management, but addresses effectiveness itself.

If management included everything effective, it would address far too great a subject area for intelligent development in any single-volume work. The limitation I recognize is a substantial one. This work is addressed to the specific efforts of the senior manager. It is addressed to what this person can accomplish, and the work required for gaining the desired business results.

This limit is most severe in the area where management science would cover the structural design of business organizations, or the integration of management initiatives. These are inter-personal applications, and this work is limited to what a senior manager can accomplish within the regular business environment.

Effective Spread into Local Politics

Is there management beyond what the manager can do within the business environment?

Gerald Springer wants to create an impression of growth as part of his campaign to gain new business. To do so, he has to get the message out that he is able to grow, and he can use that to gather the new business that will support his growth.

To make this point, he contacts a local architect with the stated purpose of having his current facility expanded. He contacts another local firm for an estimated cost to double the size of his employee parking lot.

He also begins attending local political events that might impact on gaining a permit for the actual expansion. He further contacts several local businesses that provide temporary manpower with his interest in establishing a working relationship.

The impact is likely to be a general publication of his willingness and ability to expand, which will bring a number of others to his door to support that expansion. He is likely to be contacted by builders in the local area who might want to provide new homes to any people that might migrate in. He could well be provided with advertisements by local stores and service providers for the same general purpose. He might be contacted by potential customers who would be looking for what he could do for them with his expanded capacity.

Gerald's actions are all part of management, undertaken for the purpose of expanding the business, the original intent assumed for his efforts. They are management actions. They are therefore taken in the larger business environment, even though they have nothing direct to do with ongoing business operations, or even with those working in the business.

I have provided this example for the simple purpose of addressing the social and political aspects of business management as areas that will still be in need of development. This text is generally limited to work within a business.

Tools

Each section of this work will be punctuated with an address of tools for senior manager use.

Just what is a tool?

A tool is anything the reader uses to accomplish a purpose. A pebble in the stomach of a cow accomplishes nothing, but that same pebble is a necessary part of the digestion process for a seed-eating bird. For the one, it is a potential problem, for the other a tool.

A tool is something that a person uses as an aid for accomplishment. A tool is not just something you hold in your hand, but can be anything that is used.

With management, we have an intellectual effort yielding a practical result. The management tool is something that is used as an aid to an intellectual effort.

A redirection of management to practical understandings is an aspect of this larger work. We will be addressing how attitudes and approaches can be management tools. They are what a manager can use to further an accomplishment.

One primary tool for this first section is the understanding that management is not limited to things that are done within the confines of a business. While most management efforts are restricted to actions within a business, management can reach anywhere into the larger business environment.

I am educated as an industrial engineer, a specialist in efficiency and management engineering. My development of management science materials may seem a little out of line with modern management thinking. This is also a new management tool.

Even as industrial engineering provides new points of observation, it reduces the importance of lessons drawn from more traditional sources. The viability of engineering impacts on values derived from other business leaders of our day. The idea of business leaders following one another around may be appealing, but the tool from the above analysis puts more emphasis on gaining a result through others.

And what of dressing for success; it has proven to be effective, but does it have a good scientific basis?

The senior-manager perspective turns this around. If you are the one in charge, will you let yourself be lead in decisions by the quality of the dress of the one who is making presentation? The answer is not a firm yes or no, but the application of the art of management to your decision process. It will address questions such as whether the person who dresses to influence is likely to provide good information in support of your decision. How will efforts in that direction impact the information provided?

This work does not have the answers so much as a clarifying vision. Good management supports intelligent and effective decision process. The presented tools are limited to support, because the actual process of management is an artistic expression.

Chapter 2: Defining Basic Terms

The Importance of Language
"The problem is solved!"

The above seems to be an almost absurdly simple statement, but just what does it mean?

Oddly, it has such a widely variant meaning that uttering a statement like this can be very misleading. To the scientist, who addresses a problem as an intellectual challenge, it means that there is an application of scientific logic that has yielded the desired intellectual result. To the engineer, who is technical support for those who can apply a solution, it means that there is a practical way for the one who has the problem to address the situation and make the problem go away. To the manager, who has something to accomplish, it means that the threat to performance has been handled.

One of the longer-standing jokes of technical engineering is that there are two things that you cannot do in business. You cannot teach engineers to communicate effectively; and you cannot teach managers to listen to them, even if they could.

As in most such observations, these derive their humor by describing our real business environment in an unusual way. Perhaps a more effective understanding of our communication challenge is derived by example; you cannot receive AM radio stations on an FM radio. They don't use the same type of language to communicate. They don't know how to send and receive intelligence one to the other.

In business, communication is within the purpose of management. Management includes special knowledge and technique for getting others to do things, and that involves effective communication. Not only is there a need to tell someone else what has to be done, but to communicate its priority and potential for accomplishment.

For example, if Bob Suggs, as Lee's supervisor, tells him to solve a problem, the communication is uncertain until we know what both of them understand by the use of the terms involved. Is Bob asking Lee to handle a situation, to derive a way to handle it, or to find some sort of intellectual means to address the problem? The meaning of the assignment will depend upon their joint understanding of the concept of a solution.

The reason for my intensity in addressing this subject is the importance of this communication for the one who has something to accomplish.

How is Bob going to best assure that he will gain his desired result?

When it comes to management, there are several key definitions that become effective tools for the senior manager. These are understandings of the meaning of terms that are necessary for the effective communication of authority and responsibility for gaining results in a business environment. These will be addressed below.

Before doing so, there is one key term that has great significance in the study of business language. The word is "Jargon."

Definition Vs Jargon

Because of our current lack of effective understanding, this term has come to be unfairly and improperly despised.

The concept of jargon is not singular. In a positive sense, jargon is a term for an intellectual shorthand used to address common subjects in an uncommon area of knowledge. It is a way to simplify communication between those who hold special-area knowledge.

"Serial reassignments are a form of suboptimization."

To most warehousemen, this would be effectively unintelligible. It would contain little meaning or purpose, and would communicate almost nothing.

To the manager, who deals with some of the concepts involved, the meaning is there, and the statement can be "interpreted" by an intellectual process into other managerial concepts that will have good meaning. The exact meaning is unlikely to pass, but it is intelligible.

To the efficiency specialist, this is a potent statement that relates a class of managerial processes to organizational efficiency. It uses shorthand to communicate a complex understanding that goes far beyond its immediate terms.

The importance of this to the senior manager is found in the differing jargons used by various classes of managers and workers. Communication is within the purpose of management, and the manager must become effective through his or her communications to others. The effective use of jargon can be a very valuable part of that communication.

It is also of great importance to this work, as I am addressing concepts to several classes of managers and will accordingly have to either establish a common language, or address subjects separately to each class of readers.

The classes of managers are separable by purpose. Those who have something specific to gain through operating a relatively independent part of the organization will generally be termed top, senior or executive-level managers. Those who receive assignments that define the value they must gain through directing subordinate managers and staffers are general or mid-level managers. Those who direct individual workers to their productive efforts are foreman or direct managers. Each class has its own sense of language. Each has its own management jargon.

Still further, there are distinctions that arise because of our modern approach to management structures. Direct managers in internal support areas often assume the basic jargon of mid-level managers with whom they work closely. Staff managers often assume the jargon of the top or senior-level managers. This difference in language is one of the challenges that face the senior manager who would maximize his or her effectiveness.

To address the science of management in a coherent way, I must set some definitions up front, and provide a consistent application throughout this work.

Management and Accomplishment

Still another preliminary matter addresses the extents of the communication. A manager can, as an extreme example, bring a loaded shotgun to work and use that as a means for communication. Our aggressive manager can tell workers to do what he directs on pain of getting shot.

This is a good means for assuring short-term performance. It is, however, not good management. Management is a more limited study of performance. The effective business environment is not a place of threat, but one of performance.

The modern manager is effectively limited to gaining performance through assignment and direction. The manager uses words that communicate directions for performances that will meet the needs of the business. The manager is a communicator, whose primary tool is the use of language. The purpose of management is inherent in gaining a productive result through what is communicated to subordinates and to other managers.

Jargon is one important aspect of this communication. Its importance is not just a matter of accuracy and intelligibility, but of economy. Jargon can be extremely efficient. It can effectively communicate needs using a very few words. It can communicate priorities and purposes with an effectiveness that is difficult to achieve using generally understood language.

The key is communication. The key to using jargon is a common understanding that exists between the manager and the one who receives a message that is couched in jargon.

Consider the example of a supervisory engineer who draws a line through a truss drawing, and asks a subordinate structural engineer for a "**section analysis for various point loadings on the truss**." To most non-engineers, this would not pass an intelligible message. It would not communicate effectively. To the two engineers involved, it is a clear assignment for a structural analysis, with the output sufficiently specified so that both will know when the assignment is effectively completed.

This same engineer, when addressing this same general assignment to his non-engineering boss, might note that he is analyzing "**a proposed bridge design to see if it has sufficient stiffness to support a heavy traffic pattern.**" This communication would require use of a different language. The result of the specific assignment would not be identified in the terms used for assigning the task to a structural engineer, because there would be little communication potential. The language would have to be appropriate to the desired communication. It would have to be effective within the language jointly understood by the manager and the one who receives the information.

The manager, in identifying this same action to the CEO of the business might use still different terms, addressing "**an analysis of the viability of the product**." It would be referenced to a different purpose.

Clearly, part of the management communication function is to interpret business requirements and performances from one language to another.

For the most part, this is an obvious management performance. It may, on the other hand involve different uses for the same terms, and this can cause considerable confusion and loss of effectiveness. The same is most notable where the message is not properly translated. This can happen when information is passed around the appropriate exception manager who has knowledge of the language differences.

Consider, for example, the senior-manager statement that he wants a particular foreman to "manage" a project. The CEO's understanding of the term "management" may not be what is communicated to that foreman when he receives this message through a mid-level manager. That foreman's concept of the term may well be limited to directing assigned workers to performances. The CEO is probably more interested in gaining a product than in directing workers effectively, and there is a high potential for miscommunication.

This presents effective communication as a recurring challenge. It will be most notable in the section on managerial assignments.

Definitions for Science, Engineering and Art

This work addresses three aspects of performance, and accordingly needs some basic understanding of all three.

Surprisingly, the least understood is "science." A science is a collection of knowledge concerning a subject, with the purpose of prediction. The foundation for science is the "scientific method." This is a process that is arranged to derive good and effective knowledge concerning a subject.

Science is an attempt to describe what is real. It is a way to address observable reality as a series of postulates or statements that generally describe what can be observed by other researchers. Science is a basic set of understandings that can be applied to predict what will happen when certain situations or events are encountered.

Science does not produce truth. It produces a set of "scientifically true" statements that effectively describe what is observable. The effective truth is limited to the observations made. The laws of science are extractions from observations, and do not determine the potential for observing alternative rules in action.

To understand the limits of science, consider the old and remarkably well-developed science of astronomy. Man first looked up into the sky and saw the motions of the various objects there.

He could see them all moving around him. Therefore, man, and where he dwelled, was the center of all things. This was the truth for that time.

Later, man came to understand that he was on a planet, and that the planet moved around the sun. It was only the other objects in the sky that circled around the earth. That was then the scientific truth that could be observed.

Still later, man recognized the solar system where the earth was just one more planet in a set of planets that moved around the sun; and that the sun was a star in a galaxy. This was then the scientific truth that could be observed.

Under the theoretical observations made by Einstein and others, we learned that the stars and planets do not move about central objects, but that they are mutually interdependent gravity systems that rotate about their gravitic centers. This is now the observable truth. The moon, for example, never really goes around the earth, but follows a wave-like variation from an elliptical orbit around the sun. It is more like the smaller part of an orbiting two-planet system than like the Earth's satellite.

The strength of science is in repeatability. That which is observed by one experiment, is very likely to be observed when the same experimental situation is repeated. This is where the potency of science is realized.

The Scientific Process

1. **Establish the hypothesis**
2. **Arrange an experiment by eliminating variables**
3. **Run the experiment to test the hypothesis**
4. **Observe and report the results**
5. **Establish a theory to explain the results**

The scientific process is both simple and direct. The hypothesis is a statement of fact.

Examining the truth of that hypothesis becomes the purpose for the rest of the effort. The scientific hypothesis is a statement that is to be tested by an experiment that will observe if it is demonstrably true.

The experiment is then designed to limit variables to those that are being tested. The desired result is an experiment where; if the hypothesis is true, it will have one result; and if it is false it will have another result. The scientific truth of the hypothesis can then be either verified or denied through the experiment.

A science is a collection of these statements. It usually implies that the statements of scientific truth are codified in some fashion that makes them easier to apply.

A science does not yield truth, but a set of statements that are demonstrably true concerning observations made. There is, as was made clear in the example of astronomy, always opportunity to make other observations and to derive other hypotheses. The fact that a statement is demonstrably true within experiments that have already been run does not make it an absolute truth that is applicable to all new situations.

> **Science is very poorly understood. Consider the statement that we have competition between religion and science as to the origin of our universe. We are taught that science references a theory of creation, and religion only has a Creator referenced in early writings.**
>
> **Science is based on experiment and observation, and neither of these presented theories have any scientific potential. Both are simply hypotheses that lack experimental proof or challenge. There is no scientific truth statement that can be made.**

I would make one secondary distinction. There is a difference between hard and soft science. A hard science is one where the accuracy of statements exceeds our ability to observe the results.

If you have two physical objects and you want to measure the continuation of relative motion, it can be measured as accurately as the instruments you are using to measure it. The law of the conservation of momentum becomes immediately reliable at all levels of use; it is a statement from a hard science

A soft science lacks this accuracy, and often relies upon statistical truths. If a number of dogs are fixed up as in Pavlov's experiment to demonstrate salivation at the sound of a bell, then they will generally salivate on queue. There is no way to test how much any dog salivates, or whether every dog will generate a predictable amount of salivation with the same amount of conditioning. The hypothesis of classical conditioning was a statement requiring an accuracy that could not be directly observed in any instance, but that was statistically observable. The findings did not have individual and repeatable accuracy for every event observed.

This difference is most important when applying a science to predict a result. Wherever we deal with the behavior of people, we deal with soft science. We have scientific statements that are more or less valid in predicting how people are going to behave given the situation in which they are found. Individuals don't act in the same exact and predictable manner. There is an internal intellectual guidance that is part of the individual's performance potential.

Management is a soft science in the sense of gaining performance through others. Statements of truth may be statistically valid, but are unlikely to be determinative as to any one application.

This becomes an important understanding. The science of management is a soft science; it deals with people. Performing management requires artistry as much as scientific manipulation.

This begs definition for the term "Art." It is a word that involves the use of aesthetics and imagination in a conscious and deliberate attempt to create. Our use of the word addresses creation in terms of business management. Within management, artistry is in the deliberate and conscious effort to create a desired effect through the efforts of others. We will be addressing the art of management right along with the science.

The initial use of the art in management is through the application of the scientific process. There is an intellectual artistry in the establishment of a scientific hypothesis to be tested. There is artistry in the design of an experiment that will test the hypothesis. There may be some artistry in evaluation of the results.

For the most part, the day-to-day manager has artistry in his local operations, but not in the application of management science. The artistry for establishment of the science of management is long past, and the manager uses the resulting management science as a way to gain performance.

This means that the manager will be an artist in application. There is no good recipe for applying soft sciences. There are general rules and understandings that derive from past studies, but the application to any situation will require the design of an artistic action suitable for the immediate situation.

A third term that has significance for management studies is "engineering." Engineering addresses the art of applying practical problem-solving skills. It refers to a series of approaches and techniques that have been found to consistently yield practical solutions to real problems.

When referenced to management, we have rules and procedures that have been found effective in gaining results through subordinates.

The Artistic application is first used in establishing the management science. The science of management is the directed application of the established principles and techniques found through that effective artistic application. Engineering is the codified application that follows from organizing and using the management science.

Concept Relations

- ✓ **Observation is the Heart of Science**
- ✓ **Management is a soft or artistic science.**
- ✓ **Engineering codifies science**
- ✓ **All applications require artistry**
- ✓ **Management sees to Performance.**

The importance of these terms was established during the early decades of the twentieth century. This was the period of the "Scientific Management Movement" that converted the nineteenth century boss into the modern foreman.

The artistic application that stood behind the change originated with a clear definition of management. Management was defined as an effort that was responsible for gaining a result. Once this was used to establish the modern definition of management, there was a concerted engineering effort to apply it.

The modern foreman has a unique artistic application that is very different than that of the boss. The modern application is based on needs defined by an immediate performance requirement. The performance process has need for available resources to be directed. Supporting this management application is the science of management, a body of knowledge that is unique to gaining performances. Along with that knowledge, there are established engineered procedures and techniques that have consistently lead to effectively gaining performances. Still further, we have many artistic applications that have proven fairly general in their effectiveness, even though they have not been reduced to engineering applications.

Management is:

Management is officially defined as "**gaining performance through subordinates**." For the purpose of this work, dedicated to senior management, we can expand this to "**gaining performance through a subordinate organization**." Management not only covers directing people to gain results, but directing subordinate groups to their performance requirements.

It is at this point that we come upon an area of contention. We currently address management as "**what managers commonly do**." This normal approach to definition has proven to be a substantial source of confusion. It is necessary to return to purpose to get by this confusion.

THE PURPOSE OF:

Business:	**Profitable Operation**
Management:	**Assuring that profitable operation**
Managers:	**Gaining Performance through subordinates**
Workers:	**Performing as assigned by managers**

The challenge is in priority rather than performance itself. The highest priority for any manager is performing management, and the priority of management is meeting the business purpose of profitable operation. All else is of lower priority.

One particularly damaging erroneous definition is that management is getting others to work. This is lacking in several directions. Doing work is not the same as gaining performance. Management is based on results, not on efforts. Management has a responsibility for gaining performance, and not one for effectively placing performance responsibility upon others.

Supervision is:

We must separate management from supervision. Under the currently popular definition, supervision is considered as a part of management, rather than a separate duty meeting a different purpose.

Super + Vision = Over + Seeing

Management is gaining a performance. Supervision is overseeing resources and processes. Management has a productive requirement; and supervision does not. Supervision exists to support the resources and processes that are used to gain a performance.

The immediate separation is at the level of purpose. The purpose for having a manager is gaining performance through resources. Unless there is something to be gained, there is no reason to have a manager.

The purpose for supervision is therefore subordinate to that for management. Supervision is how the business maintains the resources and processes that are given over to managers for the purpose of generating business-level values.

With this as a separate purpose, it is possible to assign and manage over both management and supervision as separate entities. Using resources to generate product is the primary purpose. Maintaining those resources is a secondary and subordinate purpose.

One of the first challenges in this work is keeping these purposes in relative perspective. This is necessary if the senior manager is to set and maintain performance requirements to best assure a productive outcome.

In our present environment, we often have supervision put forth as the primary duty of the manager, with a resulting loss of perspective and priority on the overall performance to be achieved. This misplacement of priority has had great impact on such support areas as information and personnel management. These areas address supervisory functions that have been permitted to interfere with profitable performance.

Modern Confusion – Leadership & Teaming

There are other management terms that have impact on the subject of this work; but their effect is more through their present popularity than anything relating directly to management. Leadership and teaming are two such terms.

Leadership requires either novation or initiative. The leader is someone who goes first. There must be a new direction, or a new effort that goes beyond where others are willing to go on their own. This is the heart of leadership.

Leadership relates to management as a technique. Leadership is now generally approached as a characteristic that is supposed to be valuable to the manager, or that a competent manager should exhibit.

In relating leadership to our definition of management, it is a characteristic that often supports gaining things through others. It is a willingness and ability to draw others along through leading the way into new processes or performance directions.

The second term, teaming, is a similar term in effect. Teaming is also a characteristic that supports performance through others, but by having the manager join in and take part in the effort.

I would note that there is a natural teaming that takes place in a properly running work group. The manager has a valuable and necessary part to play in arranging the work and supporting the people so that they are best able to gain performance. This teaming is inherent in modern performance management.

There is also the potential for teaming with other managers, a characteristic that has a manager merge his individual efforts into the larger efforts of a group. In the case of most management groups, teaming is a natural part of the superior manager's function.

This can be seen as a form of self-management by managers working in concert. Like leadership, teaming is considered a valuable characteristic within management.

The confusion arises when we look at both of these at the same time. Leadership is going first, an effective denial of teaming. Teaming is submerging self-interests and directions into that of the group, an effective denial of leadership. Requiring both characteristics at the same time is counterproductive.

The ideal is, of course, to have an ability to apply whichever characteristic is most appropriate to the situation being addressed. This brings it back into management, but addresses these characteristics in a new way. Leadership is only valuable as a characteristic of management when it is used to gain performance through the efforts of others. Teaming is only valuable as a characteristic of management when it is used to gain performance through the efforts of others. Leadership and teaming are not general characteristics of managers, but address approaches to performance situations.

select a direction for management appropriate for each individual situation. Teaming and leadership are not part of the science of management. We may have some engineering rules such as, "team with other managers and lead subordinates;" but neither leadership nor teaming are engineering applications in themselves.

Efficiency is:

In the technical sense, efficiency is a very specific term. It relates the value produced with the cost of producing that value. There is no restriction on the units for measurements, but only that they reflect some concept of value and cost.

Common value measures include accomplishment of a defined result that has value, dollars produced, output products, and performance capabilities generated. Common cost measures include dollars expended, man-hours, and general resources consumed.

Efficiency = Value Produced / Cost Incurred

It is most important to recognize that efficiency is a measure of relationship. The only time that it can be measured as a single unit is where the value and cost are in the same units, leading to a unitless measure. For example, if two dollars are expended to earn each three dollars of income, the efficiency could be measured as 3/2 or 1.5.

More common efficiency measures are based on two dissimilar units, as in a production group that produces units of physical product. Production efficiency might be five completed units per man-hour. This Intelligent application employs the art of management to would be the efficiency measure.

When the term "efficiency" is used in regular business communication, it often addresses changes in efficiency, or efficiency measure comparisons, rather than the efficiency measure itself. To